Open Eye®

Optix
Pro-Pack Dome Camera

User Manual

model no. CM-525P
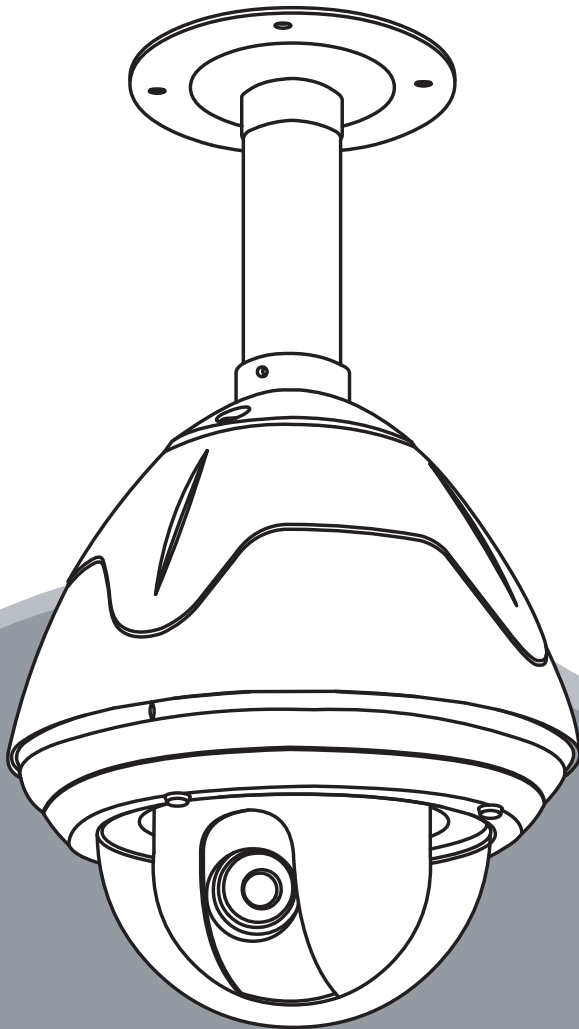
OPTIX

OPTIX® High Speed Dome Camera
User Guide

WARNINGS & CAUTIONS

WARNINGS

TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK.

- DO NOT EXPOSE THIS PRODUCT TO RAIN OR MOISTURE.

- DO NOT INSERT ANY METALLIC OBJECTS THROUGH THE VENTILATION GRILLS
  OR OTHER OPENINGS ON THE EQUIPMENT.

CAUTIONS

CAUTIONS

RISK OF ELECTRIC SHOCK
DO NOT OPEN

**CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK,
DO NOT REMOVE COVER(OR BACK).
NO USER-SERVICEABLE PARTS INSIDE.
REFER SERVICING TO QUALIFIED SERVICE
PERSONNEL.**

EXPLANATION OF GRAPHICAL SYMBOLS

The lightning flash with arrowhead symbol, within a triangle, is intended to alert the user to the presence of uninsulated, dangerous voltage within the products enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of inportant operating and maintenance (servicing) instruction in the literature accompanying the product.

COMPLIANCE STATEMENT

FCC INFORMATION: THIS EQUIPMENT HAS BEEN TESTED AND FOUND TO COMPLY WITH THE LIMITS FOR A CLASS A DIGITAL DEVICE, PURSUANT TO PART 15 OF THE FCC RULES. THESE LIMITS ARE DESIGNED TO PROVIDE REASONABLE PROTECTION AGAINST HARMFUL INTERFERENCE WHEN THE EQUIPMENT IS OPERATED IN A COMMERCIAL ENVIRONMENT. THIS EQUIPMENT GENERATES, USES, AND CAN RADIATE RADIO FREQUENCY ENERGY AND IF NOT INSTALLED AND USED IN ACCORDANCE WITH THE INSTRUCTION MANUAL, MAY CAUSE HARMFUL INTERFERENCE TO RADIO COMMUNICATIONS. OPERATION OF THIS EQUIPMENT IN A RESIDENTIAL AREA IS LIKELY TO CAUSE HARMFUL INTERFERENCE IN WHICH CASE THE USER WILL BE REQUIRED TO CORRECT THE INTERFERENCE AT HIS OWN EXPENSE.

CAUTION: CHANGES OR MODIFICATIONS NOT EXPRESSLY APPROVED BY THE PARTY RESPONSIBLE FOR COMPLIANCE COULD VOID THE USERS AUTHORITY TO OPERATE THE EQUIPMENT.

THIS CLASS A DIGITAL APPARATUS COMPLIES WITH CANADIAN ICES-003.

CET APPAREIL NUMERIQUE DE LA CLASSE A EST CONFORME A LA NORME NMB-003 DU CANADA.

CE COMPLIANCE STATEMENT

WARNING

THIS IS A CLASS A PRODUCT. IN A DOMESTIC ENVIRONMENT THIS PRODUCT MAY CAUSE RADIO INTERFERENCE IN WHICH CASE THE USER MAY BE REQUIRED TO TAKE ADEQUATE MEASURES.

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IMPORTANT SAFEGUARDS

1. Do not expose the camera to rain or moisture -
The OPTIX camera itself is designed for enclosed use or for use in a location where it is protected from rain and moisture. When exposed to moisture, turn the power off immediately and ask a qualified service personnel for servicing. Moisture can damage the camera and also create the danger of electric shock.

2. Do not install this camera upside down -
This camera is designed for mounting on the ceiling or wall.
If you install this camera upside down, for example, mounted on the floor, it may cause malfunction.

3. Do not attempt to disassemble the camera -
To prevent electric shock, do not remove screws or covers.
There are no user serviceable parts inside.
Ask a qualified service personnel for servicing.

4. Avoid placing the camera in direct sunlight -
Do not aim the camera at bright objects.
Whether the camera is in use or not, never face the unit towards direct sunlight or other extremely bright objects. Otherwise blooming or smearing may be caused.

5. Do not use strong solvents or detergents -
Use a dry cloth to clean the camera when it is dirty. If it is hard to remove the dirt on the camera, use a mild detergent and wipe it gently.

6. Handle the camera with care -
Do not abuse the camera. Avoid striking, shaking, etc.
The camera could be damaged by improper handing or storage.

7. Before operating, please check proper temperature, humidity and power source ratings -
-Use the camera under conditions where temperature is between 0C - 45C and humidity is below 60%. The input power source is 24VAC 850mA.

8. Do not use the camera in such places as shown below. The lens may become cloudy due to condensation if the camera is used under the following conditions -
- Rapid temperature fluctuation by switching an air conditioner on and off.
- Rapid temperature fluctuation due to frequent door opening and closing.
- Used in an environment where eyeglasses become foggy.
- Used in a room filled with cigarette smoke or dust.
If the lens becomes cloudy due to condensation, remove the dome cover and wipe all moist surfaces with a soft cloth.

9. Consumables -
Parts having contacts such as the lens-drive motors, cooling fan motor and slip-rings built inside the camera are subject to wear with time.
For information on the replacement and maintenance of such parts, please ask the nearest service center.

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1. INTRODUCTION

Features

This OpenEye OPTIX Pro-Pack Dome Camera is the building block for any surveillance/security system. By using multiple Pre-Packaged dome cameras, no place is too large for monitoring. Extensive and flexible architecture facilitates remote control functions for a variety of external switching devices such as multiplexers and DVRs.

A. CAMERA UNIT
- Built in 25X Optical Power Zoom Camera with True Day & Night Function
- 999 ID & 319 Preset Position
- 8 Tours consist of Preset Tour, Auto Scan and Pattern. Tour itself can be programmed with over 300 functions and Preset locations. While moving, each preset scan be watched in smooth Vector Scan mode.
- 8 Auto Scan, including Vector Scan
- 4 Pattern (240 Seconds)
- 8 Privacy Zones
- 8 Alarm Inputs / 4 Alarm Outputs (NC & NO)
- Variable speed from 0.1/sec to 90/sec
- Turbo speed is Max 360/sec with Ctrl pressed
- Maximum speed is inversely proportional to the zoom ratio
- Programmable user preferences (Alarm, Preset, Title, etc..)
- Up to 999 selectable camera addresses (4095 Optional)
- Built in RS-485/422 receiver driver
- Built in Power Surge Protection and Lightning Protection
- Bubble dome with black inner shield for concealing the camera

Power Consumption

- OpenEye Optix Power Consumption:
    850mA 24VAC (20W)

- Camera with Outdoor Housing (Pre-Packaged)
    Max Power Consumption: 68W (2,850mA 24VAC)
    Higher than 24VAC 3A spec Power Adapter is required for Camera + Outdoor housing

- Outdoor Housing Power Consumption:
    Cooler: 50mA 24VAC (1.2W) * 2 = 2.4W
    Heater: 1,000mA 24VAC (24W) * 2 = 48W

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2. INSTALLATION / CONFIGURATION

2.1 Basic Installation

A. PACKAGE CONTENTS

	Qty
OPTIX Pre-Pack Dome (Dome Camera Unit)	1
Ceiling Mount Bracket	1
Joint Pipe	1
Plastic Anchor	4
Screws for Plastic Anchor	4
L-Wrench (M4)	1
L-Wrench (M5)	1
Block Protector Cap	1
Cable (Alarm In/Out)	2
Instruction Manual	1
Silicon Rubber Sealant	1
Teflon Tape	1

B. PART LIST

① Ceiling Mount Bracket
② Joint Pipe
③ Pipe Flange
④ Block Protector Cap
⑤ Camera Housing
⑥ Heater
⑦ Terminal PCB
⑧ Cam Unit
⑨ Bubble Assy
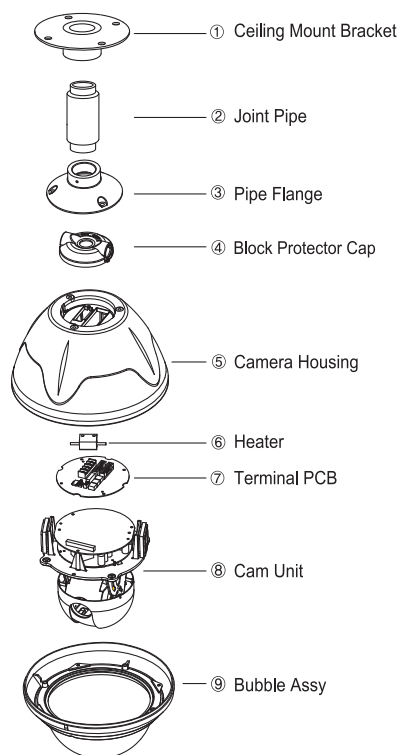
Figure 1 - Parts List

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2.INSTALLATION / CONFIGURATION

C. BASIC CONFIGURATION

Alarm Input
Up to 8

Sensor

Alarm
Output
Up to 4

Siren

Flashing Light

Up to 999 Camera

Control signal cable

MACHINE ID : 1
Switch 9 : OFF
Switch 10 : OFF
(RX TERM)

AC 24V
power supply

MACHINE ID : 2
Switch 9 : OFF
Switch 10 : OFF
(RX TERM)

AC 24V
power supply

MACHINE ID :999
Switch 9 : ON
Switch 10 : ON
(RX TERM)

AC 24V
power supply

Rear   Front
DC12V
500mA
Adaptor

Rear   Front
500mA
Adaptor

Rear   Front
DC12V
500mA
Adaptor

Junction Box
Slave In
Slave Out

REAR

Junction Box
Slave In
Slave Out

REAR

Junction Box
Slave In
Slave Out

REAR

Master Controller   Slave Controller 1   Slave Controller 2

Figure 2 - Basic Installation Diagram

2.INSTALLATION / CONFIGURATION

The Pro-Pack dome camera must be installed by qualified service personnel in accordance with all local and federal electrical and building codes. The system should be installed according to Figures 3 through 9.

⚠ The Pro-Pack OPTIX dome camera is for use in surface mounting applications. The mounting surface should be capable of supporting loads up to 10lb(4.5Kg). The Pro-Pack OPTIX dome camera's base should be attached to a structural object, such as hard wood, a wall stud, or ceiling rafter that supports the weight of the dome camera.

Remove Plastic Film
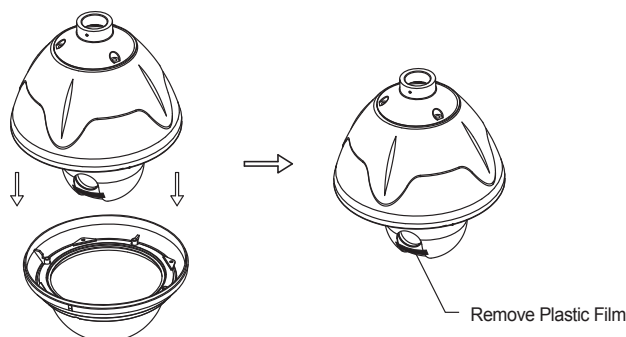
Figure 3 - Removing Plastic Film

Wrap teflon tape around the joint pipe threads before attaching the Ceiling Mount Bracket and the Pipe Flange.

Seal the surface of the ceiling mount bracket with an ⅛" bead of the sealant included in the camera packaging. **Note:** The bead of sealant must be ½ " from the perimeter to ensure a proper seal.
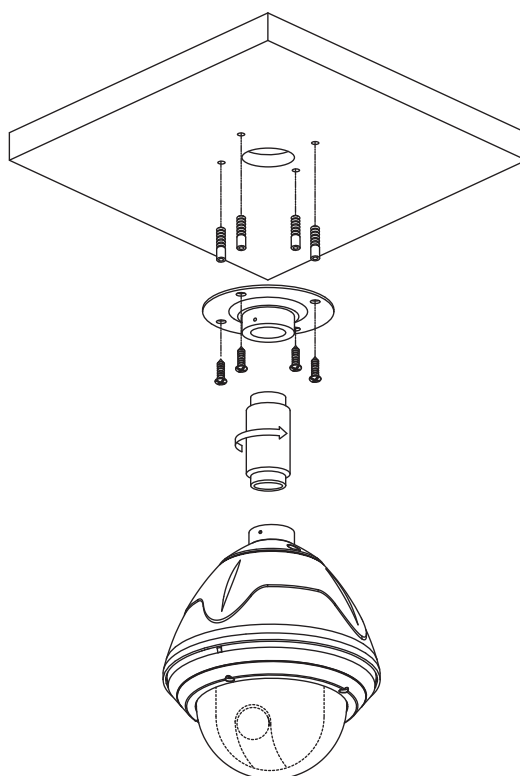
Figure 4 - Installation of Pole Mount

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2.INSTALLATION / CONFIGURATION

The Pro-Pack dome camera must be installed by qualified service personnel in accordance with all local and federal electrical and building codes. The system should be installed according to Figures 3 through 9.
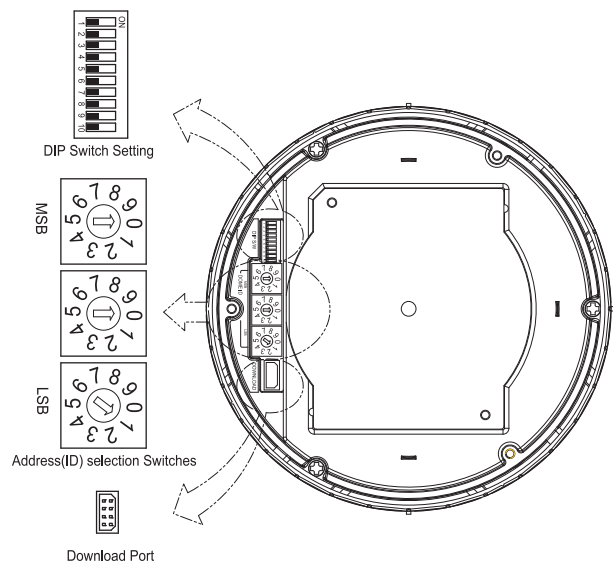
Figure 5 - Layout of Switches

D. SETTING UP THE UNIT FOR TERMINATION

The device which is connected at end of line, whether it be a dome camera or keyboard controller, must have the cable for communication terminated by setting the appropriate DIP switch. Without proper termination, there is potential for control signal errors. Total length of the cable for communication should not exceed 3,000 feet.

9	10	Function
ON	ON	Termination
OFF	OFF	NOT Terminated
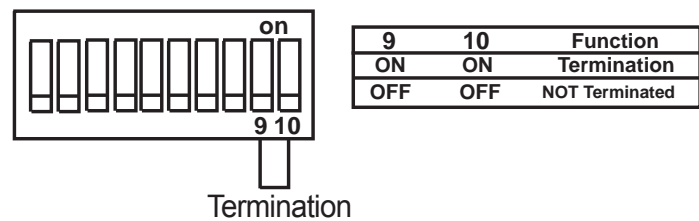
Figure 6 - Termination of Dome Camera Data Line

2. INSTALLATION / CONFIGURATION

The dome camera must be installed by qualified service personnel in accordance with all local and federal electrical and building codes. The system should be installed according to Figures 3 through 9.
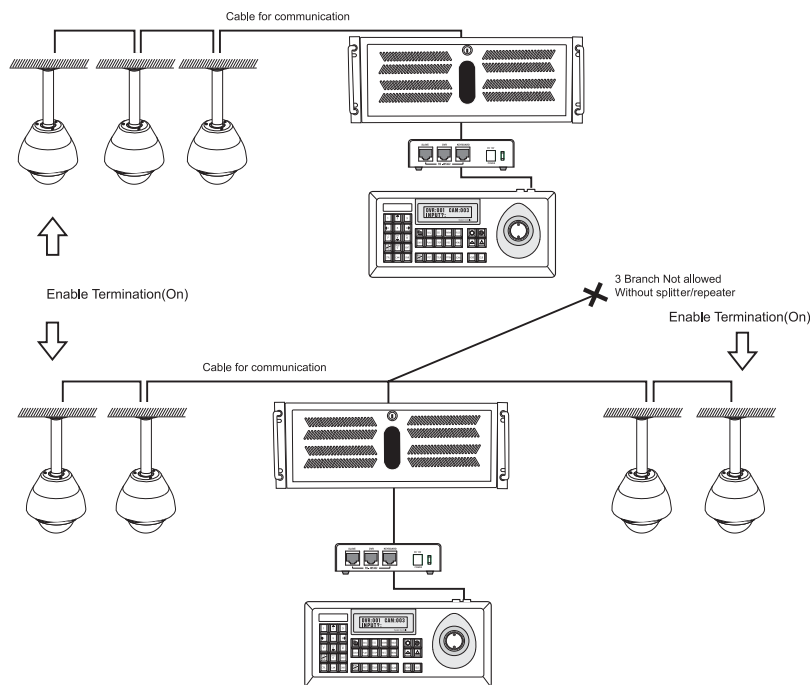
Figure 7 - Example Termination Diagram

E. SETTING THE CAMERA ADDRESS (ID)

To prevent damage, each dome camera must have a unique address (ID). When installing multiple dome cameras using a multiplexer, it is suggested that the dome camera address match the multiplexer port number.

Dome ID	SW100	SW10	SW1
1	0	0	1
2	0	0	2
.	.	.	.
999	9	9	9
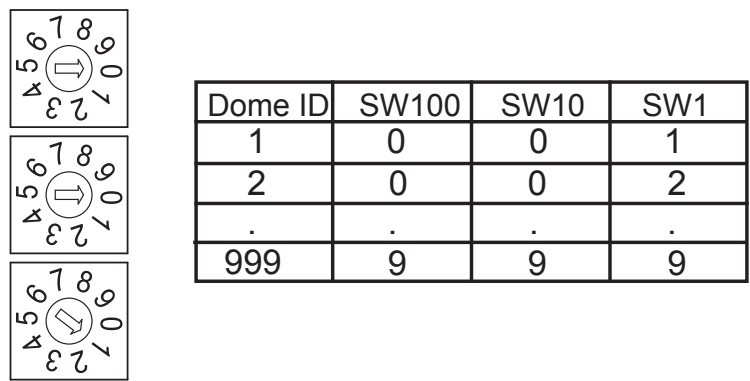
Figure 8 - Setting Address (ID) of DomeCamera

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2.INSTALLATION / CONFIGURATION

F. SETTING UP THE DIP SWITCH

If a dome camera is to be installed with an OPTIX dome keyboard controller, select the OpenEye OPTIX Protocol. Consult OpenEye technical support if a dome camera is installed with a device other than a keyboard.
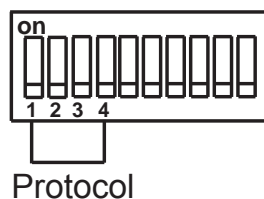
Protocol

1	2	3	4	Protocol
OFF	OFF	OFF	OFF	OpenEye OPTIX
OFF	OFF	OFF	ON	P-D Type
OFF	OFF	ON	OFF	P-P Type
OFF	OFF	ON	ON	Samsung
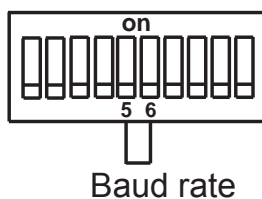
Baud rate

5	6	Baud rate
OFF	OFF	9600
OFF	ON	4800
ON	OFF	2400
ON	ON	1200

RS-422/485
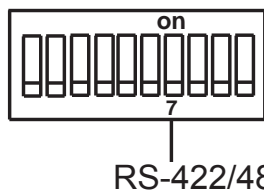
7	Function
ON	RS-422
OFF	RS-485

NTSC/PAL
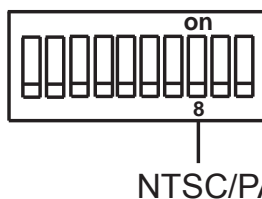
8	Function
ON	PAL
OFF	NTSC

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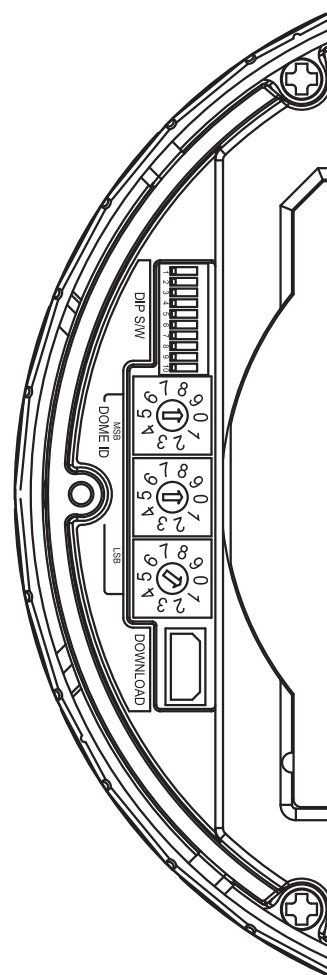
2. INSTALLATION / CONFIGURATION

2.2 Connecting Wiring

A. CONNECTING RS-485/422

The dome camera can be controlled remotely by an external device or control system, such as control keyboard, using RS-485 half duplex, RS-422 duplex or simplex serial communications signals. Connect marked RX+, RX- to TX+ and TX- of the RS-485 control system.

If control system is RS-422, connect TX+(TRX+), TX-(TRX-) of the dome camera to TX+, TX- and RX+, RX- of the control device respectively.

B. CONNECTING VIDEO OUTPUT CONNECTOR

Connect the video out (BNC) connector to the monitor or video input.

C. CONNECTING ALARMS

AL1 to 8 (Alarm In)
You can use external devices to signal the dome camera to react to events. Mechanical or electrical switches can be wired to the AL (Alarm In) and GND (Ground) connectors. See Chapter 3 - Program and Operation for Configuring Alarm Input.

Note: All the connectors marked GND are common.

Connect the ground side of the alarm input and/or output to the GND connector.

NC (NO) 1 TO 4 (Normally Closed or Normally Open: Alarm Out)
The dome camera can activate external devices such as buzzers or lights. Connect the device to the NC (NO) (Alarm Out) and COM (Common) connectors. See Chapter 3 - Program and Operation for Configuring Alarm Output.

D. CONNECTING THE POWER

Connect the AC 24V 850mA Power Adaptor to the OPTIX dome camera.

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2. INSTALLATION / CONFIGURATION

③ Alarm Input

④ Alarm Output

① RS-485/RS-422

② Video Output Connector

⑤ Power

POWER INPUT 24VAC
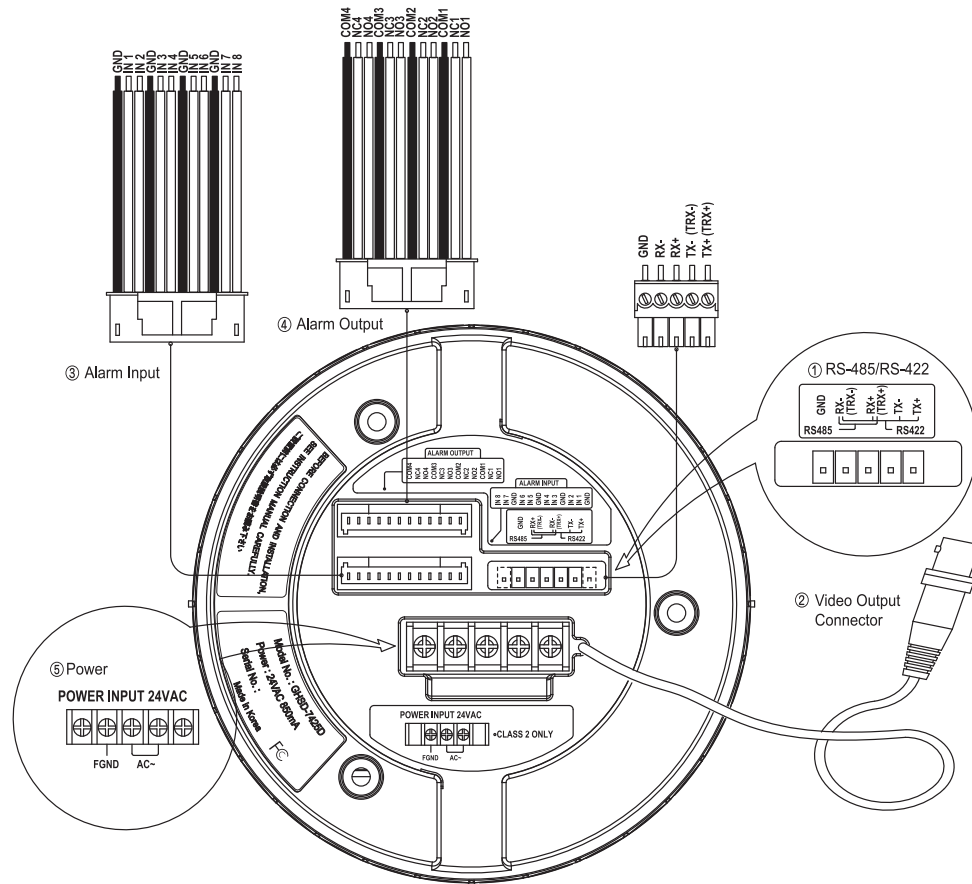
2.3 Getting Started

Once installed, apply power to the dome camera. Once power is turned on, the dome camera will start a configuration sequence. When configuration is done, the following information is displayed.

LOADING DOME ADDRESS (001)

CHECKING EEP ROM

INIT. CAMERA (OK)

INIT PAN (OK)

INIT TILT (OK)

OPTIX DOME 1

CAMERA TYPE: 25XDN

COMM. MODE: RS-485

BAUD RATE: 9600

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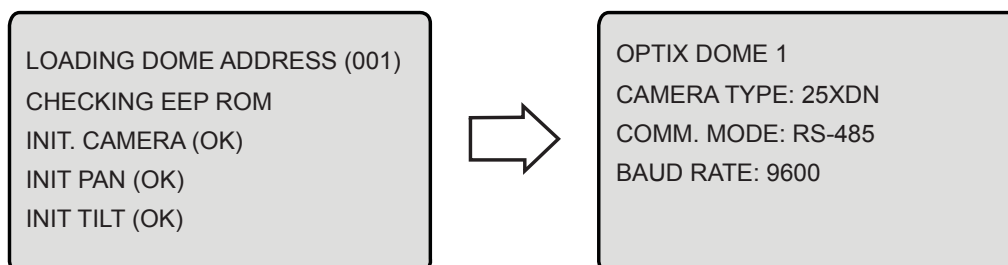
3. PROGRAM & OPERATION

3.1 Getting Started

Before you program or operate OpenEye OPTIX Dome Camera, you must select the dome camera by pressing the dome camera NO + CAM on the OpenEye Keyboard Controller.

Example: Pressing 1, 0 and CAM key sequentally will select the dome camera 10. The selected dome camera ID will be displayed on the LCD monitor of the OpenEye Keyboard Controller.

3.2 Accessing On-Screen Menu Utility

A. CONTROLLING THE ON-SCREEN UTILITY

You can open the On-Screen menu utility on your monitor by pressing the (MENU) KEY on the keyboard controller. The following On-Screen utility will appear.

ACTION	FUNCTION
MENU	Call on On-Screen Menu Utility or Exit (Escape)
Joystick left or right	Go into the sub-menu items.
	Execute the command (Exit)
	Change Value
	Navigate through menu items
Joystick up or down	Navigate through menu items
Joystick down	Finish editing title
Zoom Handle twist	Change Value
	Enter editing title mode.
CTRL + Joystick	Change value of angle/zoom ratio
CLR/ESC	Move to the previous mode

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3. PROGRAM & OPERATION

A. OPTIX HIGHSPEED DOME MENU

```
MENU
  │
SYS INFO
  │                              ┌─ AREA TITLE
  │                              ├─ PRIVACY ZONE
DISPLAY ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ├─ OSD DISPLAY
  │                              ├─ VIEW ANGLE
  │                              ├─ POSITION
  │                              └─ COOLER/HEATER
  │              ┌─ HOME/PRESET
  │              ├─ AUTO SCAN
DOME SETUP ─ ─ ─ ├─ TOUR
  │              └─ PATTERN
  │              ┌─ FOCUS
ALARMS           ├─ WB CONTROL
  │              ├─ AE CONTROL
CAMERAS ─ ─ ─ ─ ─├─ LINE LOCK
  │              ├─ SCREEN SETUP
  │              ├─ DIGITAL EFFECT
  │              └─ DAY/NIGHT
  │                              ┌─ INIT DATA
  │                              ├─ DOME RESET
CONFIG ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─ ─├─ RELOAD ID
  │                              └─ GENERAL
  │              ┌─ ENGLISH
  │              ├─ RUSSIAN
  │              ├─ GERMAN
LANGUAGE ─ ─ ─ ─ ├─ FRENCH
  │              ├─ SPANISH
  │              ├─ ITALIAN
  │              ├─ POLISH
  │              └─ PORTUGUESE
  │
EXIT
```

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4. PTZ SETUP MENU

4.1 HOME

After a dome control menu item has been selected, follow the directions below to set the function.

```
--- OpenEye OPTIX PRE-PACK ---

HOME
SYS INFO
DISPLAY        ▷
DOME SETUP ▷
ALARMS
CAMERA         ▷
CONFIG         ▷
LANGUAGE    ▷
EXIT
```

```
        HOME FUNCTION SETUP

HOME FUNCTION      :HOME
FUNCTION NUMBER    :
FUNCTION TIME(SEC  :010
FUNCTION MODE      :AUTO
SAVE EXIT
```
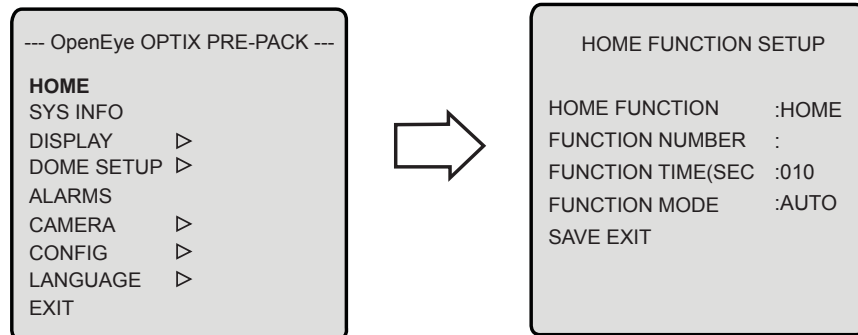
The HOME function can be set so that the camera automatically goes to Preset, Tour, Pattern, or Auto Scan after the OpenEye Keyboard Controller has been idle for an amount of time. For example, if a joystick controller is idle for 10 seconds (FUNCTION TIME), the camera goes to the previous mode.

Folow these steps to program the Home Function:

1. Select MENU to display the main menu on the monitor. Select HOME menu and enter the menu.

2. You can select the Home Function by pressing the PST, TOUR, PTRN, or SCAN button on your OpenEye Keyboard controller.

3. After selecting the number, move the function number (Each function has maximum numbers). For example, you can have 319 Presets, 8 Tours, 4 Patterns and 8 Auto Scan options. (You can call only saved items)

4. Select Function Time (Select from 10 to 240 seconds)

5. Select Function Mode AUTO/MANUAL (In AUTO Mode, the dome returens to the previous task after completing the HOME FUNCTION)

6. SAVE and EXIT

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4.2 SYS INFO

The OpenEye OPTIX Camera's set up menu provides essential information about the dome camera if service is required. When you view this screen, you can determine the camera type and ROM version. The information on this screen can't be modified.

```
--- OpenEye OPTIX PRE-PACK ---

HOME
SYS INFO
DISPLAY         ▷
DOME SETUP ▷
ALARMS
CAMERA          ▷
CONFIG          ▷
LANGUAGE    ▷
EXIT
```

```
 SYSTEM INFORMATION

 ------------------------------------------------------------
CAMERA TYPE      : 25XD / NTSC
H/W VERSION      : VI. 03P
S/W VERSION      : VI. 44P
PROTOCOL         : OPENEYE OPTIX
COMM. MODE       : RS485
BAUD RATE        : 9600
 ------------------------------------------------------------
EXIT : (CLR) KEY
```
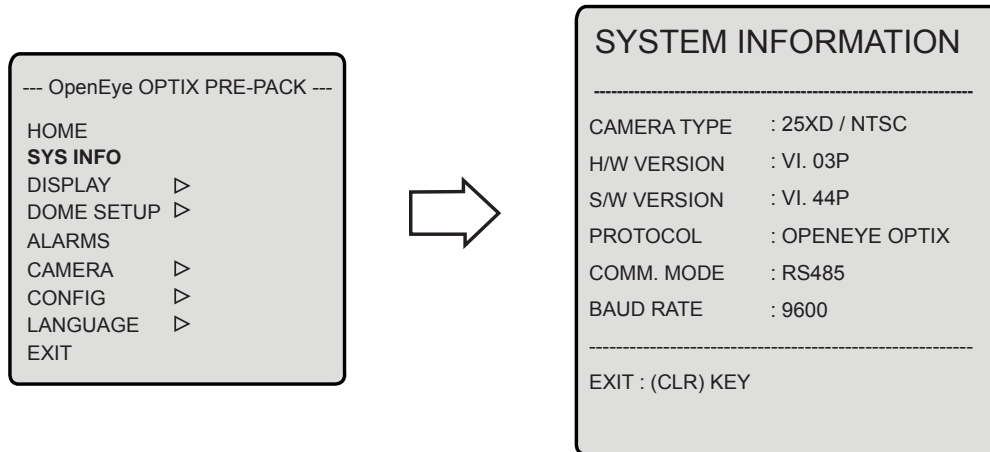
For the multi-protocol, please refer to the multi-protocol selection guide. If you want to use other protocols, consult with your local distributor.

Note: If you want to go to the previous mode, select the CLR/ESC key. To exit main MENU without saving, select the MENU button. To exit and save the options, select the save button (OpenEye OPTIX protocol only)

4.3 DISPLAY

A. AREA TITLE

If this option is enabled, the nearest area title will be displayed when the camera is moving either by manual operation, AutoScan, or Pattern. The DOME camera's [OSD DISPLAY/AREA TITLE] will override this function (Dome Camera's[OSD DISPLAY/AREA TITLE] must be turned ON).

```
--- OpenEye OPTIX PRE-PACK ---

HOME
SYS INFO          AREA TITLE
DISPLAY      ►    PRIVACY ZONE
DOME SETUP ▷     OSD DISPLAY
ALARMS            VIEW ANGLE
CAMERA       ▷    POSITION
CONFIG       ▷    COOLER/HEATER
LANGUAGE     ▷
EXIT
```

```
AREA TITLE SET UP
NO.001 : ==============
START(PTZ): 000.00
END(PTZ): 000.00

12345678
00======
SAVE EXIT
```
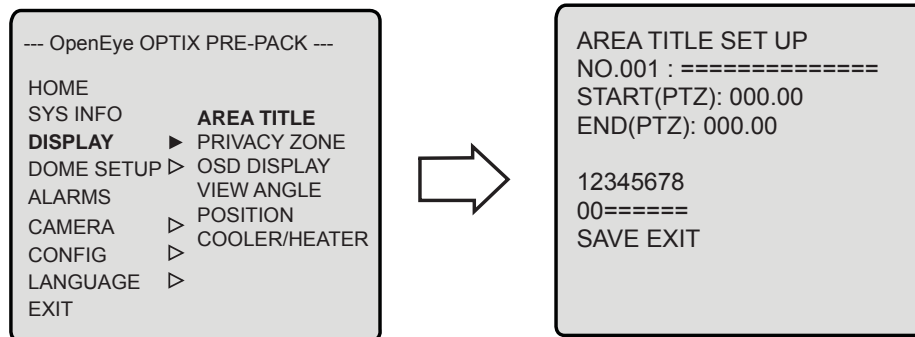
Note: If you want to write the AREA TITLE, select the area title NO. The cursor will be placed in the title line automatically.

1 Select No.

```
--- OpenEye OPTIX PRE-PACK ---

HOME
SYS INFO          AREA TITLE
DISPLAY      ►    PRIVACY ZONE
DOME SETUP ▷     OSD DISPLAY
ALARMS            VIEW ANGLE
CAMERA       ▷    POSITION
CONFIG       ▷    COOLER/HEATER
LANGUAGE     ▷
EXIT
```

2 Title

```
          AREA TITLE SETUP

TITLE: ■
       ABCDEFGHIJKLMNOP
       QRSTUVWXYZabcdefg
       hijklmnopqrstuvwx
       yz0123456789-+()=
SELECT CHARACTER: MOVE
TITLE POSITION: (CTRL)KEY+MOVE
SET CHARACTER: CLOCKWISE
CLEAR: COUNTERCLOCKWISE
SAVE: (HOME) OR (ENT)KEY
EXIT: (CLR/ESC)KEY
```

3 Start/End.

```
AREA TITLE SET UP
NO.001 : AREA
START(PTZ): 000.00
END(PTZ): 000.00

12345678
00======
SAVE EXIT
```

```
AREA TITLE SET UP
NO.001 : AREA
START(PTZ): 353.82
END(PTZ): 079.17

12345678
00======
SAVE EXIT
```

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B. PRIVACY ZONE

The Privacy Zone allows users to hide up to 8 unwanted views in a camera.

① Select No.

```
--- OpenEye OPTIX PRE-PACK ---

HOME
SYS INFO
                AREA TITLE
DISPLAY     ►  PRIVACY ZONE
DOME SETUP ▷  OSD DISPLAY
ALARMS         VIEW ANGLE
CAMERA     ▷  POSITION
CONFIG     ▷   COOLER/HEATER
LANGUAGE   ▷
EXIT
```

```
PRIVACY ZONE SETUP
NO.001    :
MODE     : DISABLE

    12345678
00 ========

SAVE EXIT
```
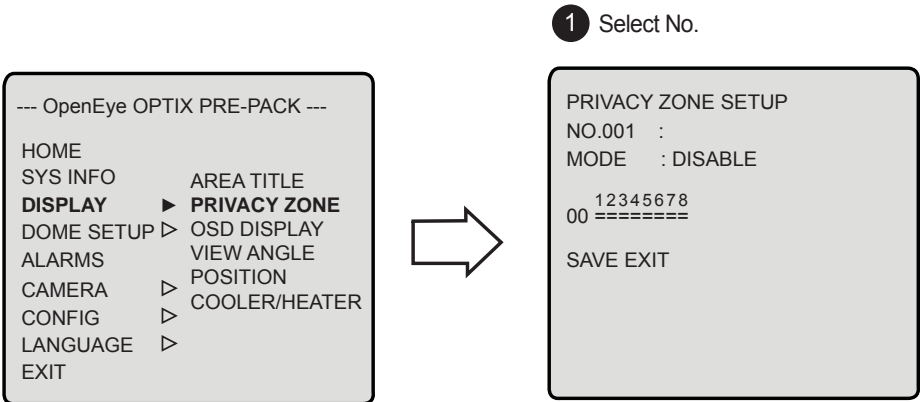
C. ON SCREEN DISPLAY (OSD)

Note: ALL displays or titles will disappeared when you set all flags OFF.

```
--- OpenEye OPTIX PRE-PACK ---

HOME
SYS INFO
                AREA TITLE
DISPLAY     ►  PRIVACY ZONE
DOME SETUP ▷  OSD DISPLAY
ALARMS         VIEW ANGLE
CAMERA     ▷  POSITION
CONFIG     ▷   COOLER/HEATER
LANGUAGE   ▷
EXIT
```

```
      OSD DISPLAY SETUP
ZOOM RATIO
PAN, TILT ANGLE
DOME ID(ADDRESS)
DOME MODE
AREA/P-ZONE TITLE
OPERATION TITLE
FLAG DISPLAY
TIME DISPLAY
TEMPERATURE
SAVE EXIT
```

```
                                    ①
         ┌──────────────────────────────────┐
         │ AREA                             │
   ③ ────│ OPERATION           D. TIME :005 │──── ②
         │                                  │
         │                                  │
   ⑩ ────│                                  │──── ⑪
         │                                  │
   ⑨ ────│ C H  T :+34.0C   D Z050 ID  :0001│──── ⑧
   ④ ────│ T1 001  P F      (259.38, 047.42)│
         └──────────────────────────────────┘
                    ⑤    ⑥    ⑦
```

① **Area/P-Zone Title**: You can see the area title, the privacy zone title has priority over the area title.

② **Time Display**: D. Time/T.Time/A.Time (Dwell/Task/Alarm Time)

③ **Operation Title**: Preset, AutoScan and Pattern Title

④ **Dome Mode**: T1(Tour1) 001(Preset001)

⑤ **Flag Display**: P F (Privacy/Flip on)

⑥ **Zoom Ratio**: When the camera is digital zoom, you can see D signal

⑦ **Pan/Title Angle**: This will show you the position of the camera

⑧ **Dome ID(Address)**: Standard is 999, Optional is 4095

⑨ **Cooler/Heater Display**: C H (Cooler/Heater On)

⑩ **Temperature**: Displays the current temperature of the dome

⑪ **CELSIUS/FAHRENHEIT Display**

4. PTZ SETUP MENU

D. VIEW ANGLE

Note: When the dome camera is installed near a wall, panning range can be programmed by users.

```
--- OpenEye OPTIX PRE-PACK ---

HOME
SYS INFO        AREA TITLE
DISPLAY      ►  PRIVACY ZONE
DOME SETUP ▷   OSD DISPLAY
ALARMS          VIEW ANGLE
CAMERA      ▷   POSITION
CONFIG      ▷   COOLER/HEATER
LANGUAGE    ▷
EXIT
```

```
         VIEW ANGLE SETUP

FLIP (ON/OFF)         : ON
OVER TILT (ON/OFF)    : OFF
PAN LIMIT (ON/OFF)    :
PAN RIGHT LIMIT       :
PAN LEFT LIMIT        :
MIRROR/REVERSE        : OFF


SAVE EXIT
```
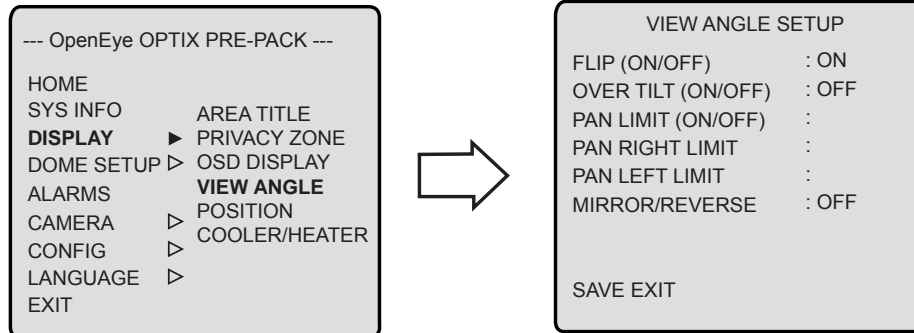
Flip - Allows the dome camera to automatically turn 180 degrees when the camera tilts to its lower position. Once the camera reaches the floor along a moving object, it willstop.

Over Tilt - The defaut limit is 80 degrees for Tilt angle. When this mode is on, you can see up to 90 degrees.

PAN LIMIT(ON/OFF): Off - When the dome camera is installed near the wall, PAN LIMIT can be programmed by user to avoid the area obsured by the wall.

MIRROR/REVERSE: Off - Normal image, **H - MIRROR**: Left-right reversal of the image, **V-MIRROR**: Upside down image, **REVERSE**: Left - right reversal and Upside down.

E. POSITION

If the OpenEye OPTIX OSD is obsured on other equipment, like a DVR, you can move the OSD horizontally and/or vertically. The factory position is 33/05 (Horizontal/Vertical). Variable 23~43 for horizontal, 02~15 for vertical.

```
--- OpenEye OPTIX PRE-PACK ---

HOME
SYS INFO        AREA TITLE
DISPLAY      ►  PRIVACY ZONE
DOME SETUP ▷   OSD DISPLAY
ALARMS          VIEW ANGLE
CAMERA      ▷   POSITION
CONFIG      ▷   COOLER/HEATER
LANGUAGE    ▷
EXIT
```

```
        OSD POSITION SETUP

HORIZONTAL POSITION     :33
VERTICAL POSITION       :05


SAVE EXIT

    ■ WARNING ■
THIS FEATURE AFFECTS
PRIVACY ZONE
```
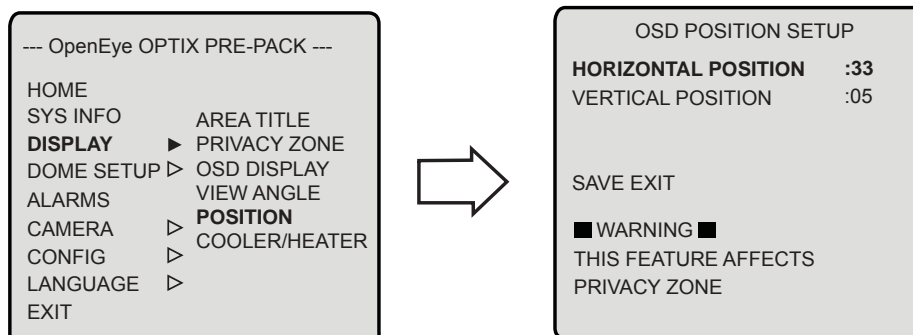
F. COOLER/HEATER

This function will allow users to keep the inside temperature of the OpenEye OPTIX Pre-Pack at a stable operating condition. If the temperature in the dome is to high, the cameras Auto Mode will regulate the temperature by turning on the Cooler. On the contrary, the heater will make the inside temperature getting higher if the unit is cold.

```
--- OpenEye OPTIX PRE-PACK ---

HOME
SYS INFO        AREA TITLE
DISPLAY      ►  PRIVACY ZONE
DOME SETUP ▷   OSD DISPLAY
ALARMS          VIEW ANGLE
CAMERA      ▷  POSITION
CONFIG      ▷  COOLER/HEATER
LANGUAGE    ▷
EXIT
```

```
      COOLER/HEATER SETUP

CELSIUS/FAHRENHEIT    :CELS.
COOLER MODE           :AUTO
HEATER MODE           :AUTO

SAVE EXIT
```
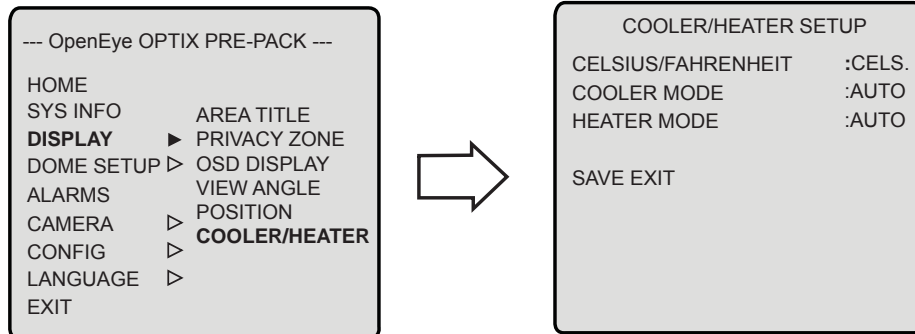
① CELCIUS/FARENHEIT: CELS./FAHR
② COOLER MODE (ON/OFF.AUTO)
     ON: Always ON
     OFF: Always OFF
     AUTO: ON ; 45°C (113°F)
             OFF ; 35°C (95°F)
③ HEATER MODE (ON/OFF/AUTO)
     ON: Always ON
     OFF: Always OFF
     AUTO: ON ; 0° C(32° F)
             OFF; 10°C (50°C)

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4.4 DOME SETUP

A. HOME/PRESET

If you need to view specific places routinely, program presets is an ideal function. A preset is a programmed video scene with automatic pan, tilt, zoom, focus and iris settings. Once programmed, enter the number and press a preset button on your controller to automatically call up the preset. In addition, presets can be assigned to alarm actions or as the "home" position for the dome camera. As many as 320 presets (HOME included), whose positions are saved in the dome's firmware, may be programmed.

There are four pages of the preset menu, each page can hold 80 presets.

❶ Select No.

```
--- OpenEye OPTIX PRE-PACK ---

HOME
SYS INFO
DISPLAY        ▷ HOME/PRESET
DOME SETUP ▶ AUTO SCAN
ALARMS           TOUR
CAMERA       ▷ PATTERN
CONFIG       ▷
LANGUAGE     ▷
EXIT
```

```
       HOME/PRESET SETUP

NO. 000      : HOME
FOCUS        : AUTO    P: 000.00
IRIS         : AUTO    T: 000.00
DWELL(SEC) : 005       Z: 001
    0123456789     0123456789
00 ●=======  01 ========
02 ========  03 ========
04 ========  05 ========
06 ========  07 ========
SAVE EXIT
```

❷ Title

```
       HOME/PRESET SETUP

NO. 001      :
FOCUS        : AUTO    P: 000.00
IRIS         : AUTO    T: 000.00
DWELL(SEC) : 005       Z: 001
    0123456789     0123456789
00 ●●======  01 ========
02 ========  03 ========
04 ========  05 ========
06 ========  07 ========
SAVE EXIT
```

```
       HOME/PRESET SETUP

TITLE: ■
    ABCDEFGHIJKLMNOP
    QRSTUVWXYZabcdefg
    hijklmnopqrstuvwx
    yz0123456789-+()=
SELECT CHARACTER: MOVE
TITLE POSITION: (CTRL)KEY+MOVE
SET CHARACTER: CLOCKWISE
CLEAR: COUNTERCLOCKWISE
SAVE: (HOME) OR (ENT)KEY
EXIT: (CLR/ESC)KEY
```

③ **Focus & Iris**: Auto/Manual

④ **Dwell Time**: 05~240 sec.

⑤ **Pan/Tilt/Zoom**

```
        HOME/PRESET SETUP

NO. 001        :PRESET
FOCUS          : AUTO    P: 000.00
IRIS           : AUTO    T: 000.00
DWELL(SEC) : 005         Z: 001

    0123456789    0123456789
00 ●●======  01 ========
02 ========  03 ========
04 ========  05 ========
06 ========  07 ========
SAVE EXIT
```

```
        HOME/PRESET SETUP

NO. 001        :PRESET
FOCUS          : AUTO    P: 033.39
IRIS           : AUTO    T: 050.81
DWELL(SEC) : 005         Z: 010

    0123456789    0123456789
00 ●●======  01 ========
02 ========  03 ========
04 ========  05 ========
06 ========  07 ========
SAVE EXIT
```

⑥ Preset Call: Input the Preset No. (1~319) and then press the PST button to call the preset

⑦ Preset Erase: Input the Preset No. (1~319) and then press CTRL + PST button for 1 second

⑧ Quick Preset Setup

You can setup the preset without accessing the main menu by moving the camera to the desired position and then pressing NO. + HOME button on your OpenEye keyboard controller

```
                                        WRITING
                                         O.K.




                Z001ID: 0010                        Z001ID: 0010
   F           (145.95, 038.60)          F          (145.95, 038.60)
```
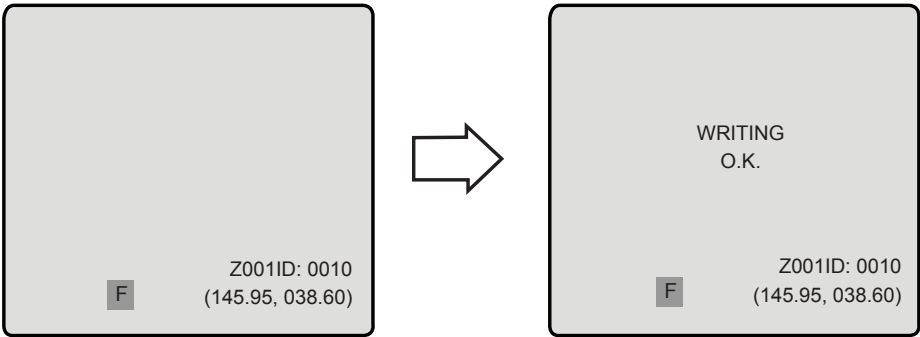
Note: If you press NO. + CTRL + HOME on your OpenEye keyboard controller, the new preset will be programmed automatically without reminding

9 Cauton ⚠

If you use quick preset setup, it will overwrite the previous preset.

F Z001ID: 0010 (145.95, 038.60)	⇨ OVERWRITE? YES: HOME/ENT NO: CLR	⇨ WRITING O.K. F Z001ID: 0010 (145.95, 038.60)

B. AUTO SCAN

The AUTO SCAN supports up to 8 programmed angles at user-programmable speeds. Follow the steps below to program the AutoScan function.

1 Select No.

```
--- OpenEye OPTIX PRE-PACK ---

HOME
SYS INFO
DISPLAY        ▷ HOME/PRESET
DOME SETUP ▶    AUTO SCAN
ALARMS           TOUR
CAMERA        ▷ PATTERN
CONFIG        ▷
LANGUAGE      ▷
EXIT
```

⇨

```
         AUTOSCAN SETUP

NO. 001        :
FOCUS          : ENDLESS (LEFT)
SPEED(PTZ)  : 1
START(PTZ)   : (000.0, 000.00, 001)
END   (PTZ)   :
DWELL(SEC)  : 005
FOCUS/IRIS   : AUTO
        0123456789
00 ●=======
SAVE EXIT
```
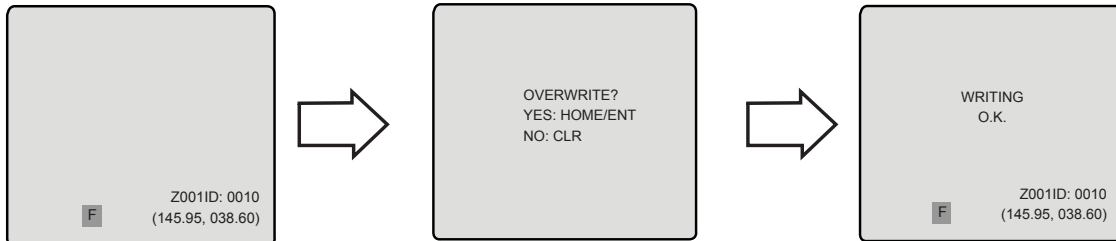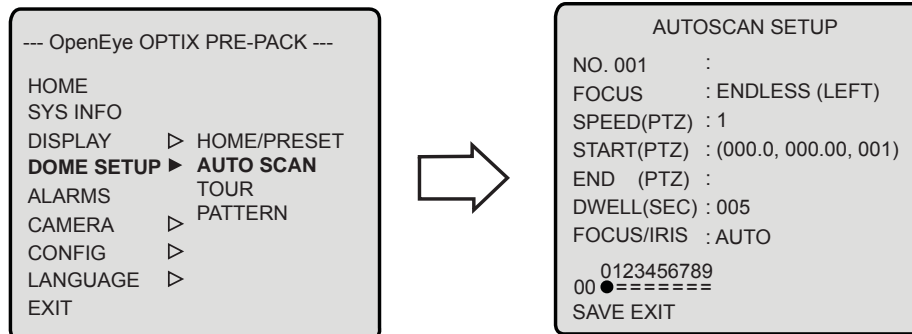
Note: Press the SCAN button on your OpenEye Keyboard Controller to go directly to the Auto Scan menu without going through the main menu.

2 Title

```
         AUTOSCAN SETUP

NO. 001        :
MODE           : ENDLESS (LEFT)
SPEED(PTZ)  : 1
START(PTZ)   : (000.0, 000.00, 001)
END   (PTZ)   :
DWELL(SEC) : 005
FOCUS/IRIS  : AUTO
        0123456789
00 ●=======
SAVE EXIT
```

⇨

```
         AUTOSCAN SETUP

TITLE: ▪
       ABCDEFGHIJKLMNOP
       QRSTUVWXYZabcdefg
       hijklmnopqrstuvwx
       yz0123456789-+()=
SELECT CHARACTER: MOVE
TITLE POSITION: (CTRL)KEY+MOVE
SET CHARACTER: CLOCKWISE
CLEAR: COUNTERCLOCKWISE
SAVE: (HOME) OR (ENT)KEY
EXIT: (CLR/ESC)KEY
```

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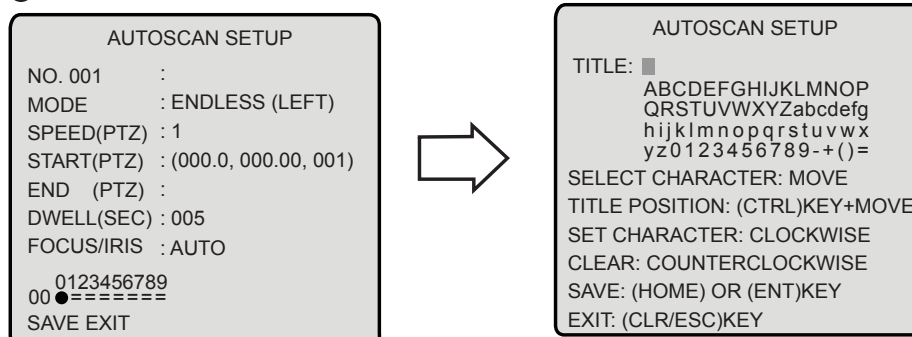
❸ Mode

```
        AUTOSCAN SETUP

NO. 001         :
MODE         : ENDLESS (LEFT)
SPEED(PTZ) : 1
START(PTZ)  : (000.0, 000.00, 001)
END   (PTZ) :
DWELL(SEC) : 005
FOCUS/IRIS  : AUTO

    0123456789
00 ●=======
SAVE EXIT
```

```
        AUTOSCAN SETUP

NO. 001         :
MODE         : COMING & GOING
SPEED(PTZ) : 1
START(PTZ)  : (000.0, 000.00, 001)
END   (PTZ) : (000.0, 000.00, 00)
DWELL(SEC) : 005
FOCUS/IRIS  : AUTO

    0123456789
00 ●=======
SAVE EXIT
```

a. Endless (Left): 360 degree endless scan from the left

b. Endless (Right): 360 degree endless scan from the right

c. Coming and Going : Auto Scan between left limit and right limit (VECTORSCAN)

❹ Select the speed of the Auto scan.

        - LEVEL 1: 1.1 deg/sec
        - LEVEL 2: 1.2 deg/sec
        - LEVEL 3: 1.4 deg/sec
        - LEVEL 4: 1.7 deg/sec
        - LEVEL 5: 2   deg/sec
        - LEVEL 6: 2.5 deg/sec
        - LEVEL 7: 3.3 deg/sec
        - LEVEL 8: 5   deg/sec
        - LEVEL 9: 10 deg/sec

❺ Start/End

```
        AUTOSCAN SETUP

NO. 001      : SCAN
MODE         : COMING & GOING
SPEED(PTZ) : 1
START(PTZ)  : (000.0, 000.00, 001)
END   (PTZ) : (000.00, 000.00)
DWELL(SEC) : 005
FOCUS/IRIS  : AUTO

    012345678
00 ●=======
SAVE EXIT
```

```
        AUTOSCAN SETUP

NO. 001      : SCAN
MODE         : COMING & GOING
SPEED(PTZ) : 1
START(PTZ)  : (358.26, 041.22, 007)
END   (PTZ) : (016.52, 276.36)
DWELL(SEC) : 005
FOCUS/IRIS  : AUTO

    0123456789
00 ●=======
SAVE EXIT
```

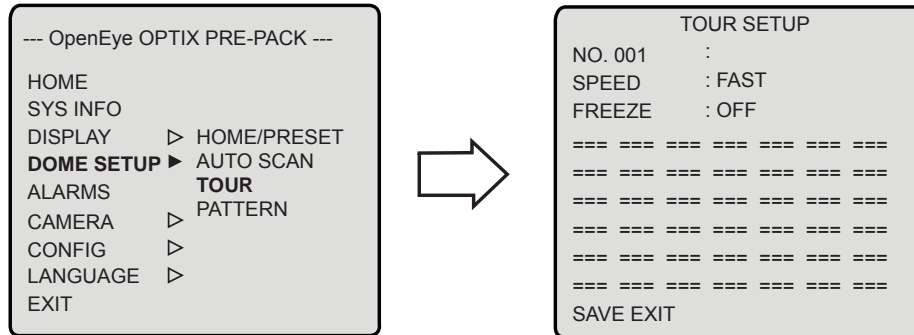❻ **Dwell Time**: 05~240 sec.

❼ **Focus/Iris**: Auto/Manual

❽ **Auto Scan Call**: Input the Auto Scan No. (1~8) and then press the SCAN button to call the Auto Scan

❾ **Auto Scan Stop**: If a joystick is connected, move the joystick to stop this function

C. TOUR

❶Select No.

```
--- OpenEye OPTIX PRE-PACK ---

HOME
SYS INFO
DISPLAY        ▷ HOME/PRESET
DOME SETUP ▶ AUTO SCAN
ALARMS            TOUR
CAMERA         ▷ PATTERN
CONFIG         ▷
LANGUAGE       ▷
EXIT
```

```
              TOUR SETUP
NO. 001        :
SPEED        : FAST
FREEZE       : OFF

=== === === === === === ===
=== === === === === === ===
=== === === === === === ===
=== === === === === === ===
=== === === === === === ===
=== === === === === === ===

SAVE EXIT
```

Note: Press the TOUR button on your OpenEye keyboard controller to go directly to the TOUR menu without going through the main menu.

❷ Title

```
              TOUR SETUP
NO. 001        :
SPEED        : FAST
FREEZE       : OFF

=== === === === === === ===
=== === === === === === ===
=== === === === === === ===
=== === === === === === ===
=== === === === === === ===
=== === === === === === ===

SAVE EXIT
```

```
            AUTOSCAN SETUP

 TITLE: ▓
        ABCDEFGHIJKLMNOP
        QRSTUVWXYZabcdefg
        hijklmnopqrstuvwx
        yz0123456789-+()=
SELECT CHARACTER: MOVE
TITLE POSITION: (CTRL)KEY+MOVE
SET CHARACTER: CLOCKWISE
CLEAR: COUNTERCLOCKWISE
SAVE: (HOME) OR (ENT)KEY
EXIT: (CLR/ESC)KEY
```
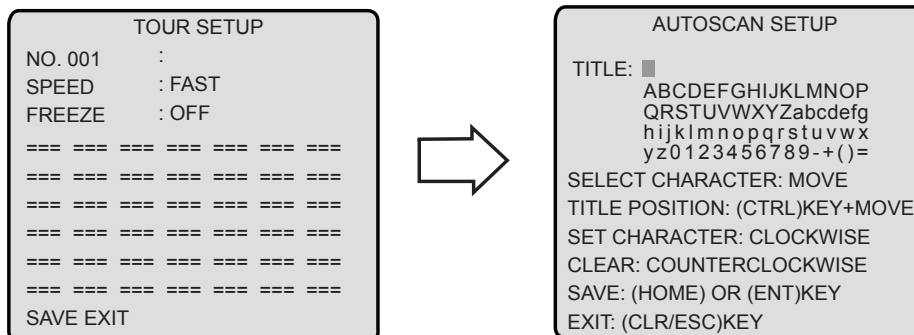
❸**Speed**: 360 deg/sec

   Normal: 180 deg/sec

   Slow: 90 deg/sec

❹**Freeze**: On/Off

   Allows for the output of a single image while the camera is performing pre-set operations, for example, the camera will output a still image before it finishes pan/tilt operation.

⑤ **Mode & No.**

Select between 4 different modes and No. (Preset, Auto Scan, Tour and Pattern)

```
        TOUR SETUP
NO. 001      :
SPEED      : FAST
FREEZE     : OFF
=== === === === === === ===
=== === === === === === ===
=== === === === === === ===
=== === === === === === ===
=== === === === === === ===
=== === === === === === ===
SAVE EXIT
```

```
        TOUR SETUP
NO. 001      :
SPEED      : FAST
FREEZE     : OFF
SC2 === === === === === ===
=== === === === === === ===
=== === === === === === ===
=== === === === === === ===
=== === === === === === ===
=== === === === === === ===
SAVE EXIT
```

Each TOUR can harmonize 42 different modes among Preset (1~319), AutoScan (1~8), Pattern (1~4) and only Tour1 can obtain Tour 2~8 additionally.
If you want to clear the 4 mode, press the HOME button.

Note: If there is no memorized Preset, AutoScan, Tour or Pattern, you can not set up this function.

⑥ **Tour Call**: Input the Tour NO. (1~8) and press the TOUR button to call the Tour.

⑦ **Tour Stop**: If you have a Joystick connected, move the joystick anywhere to stop the function.
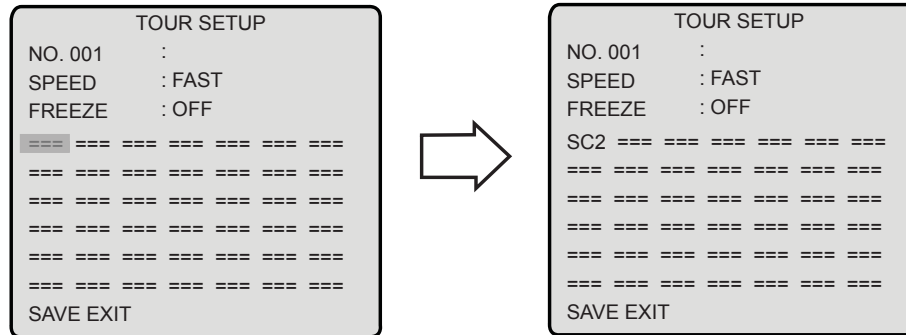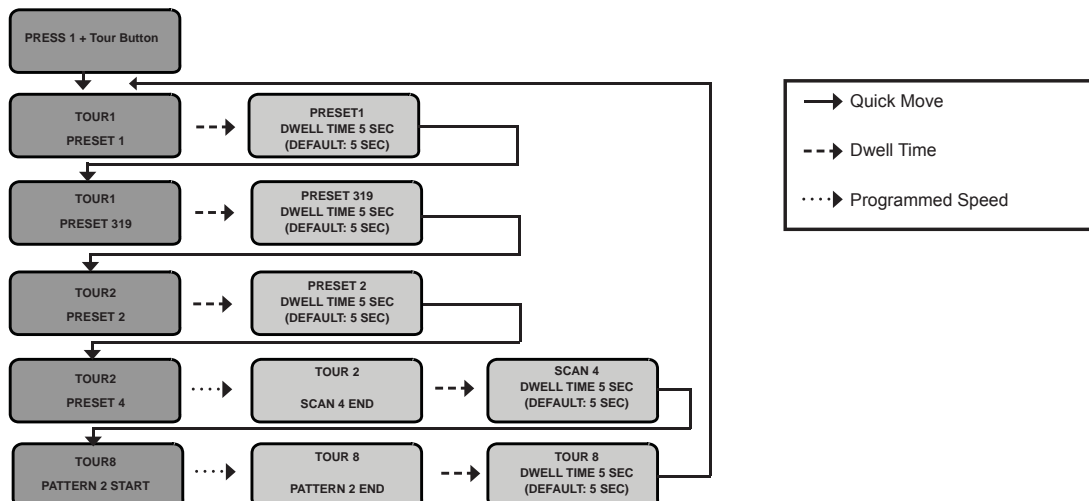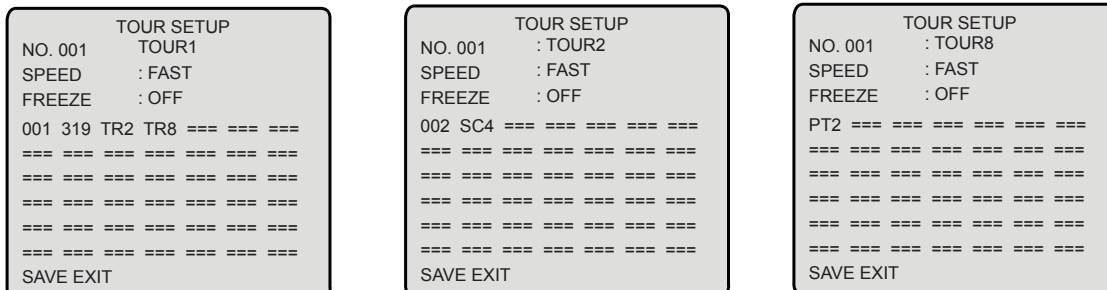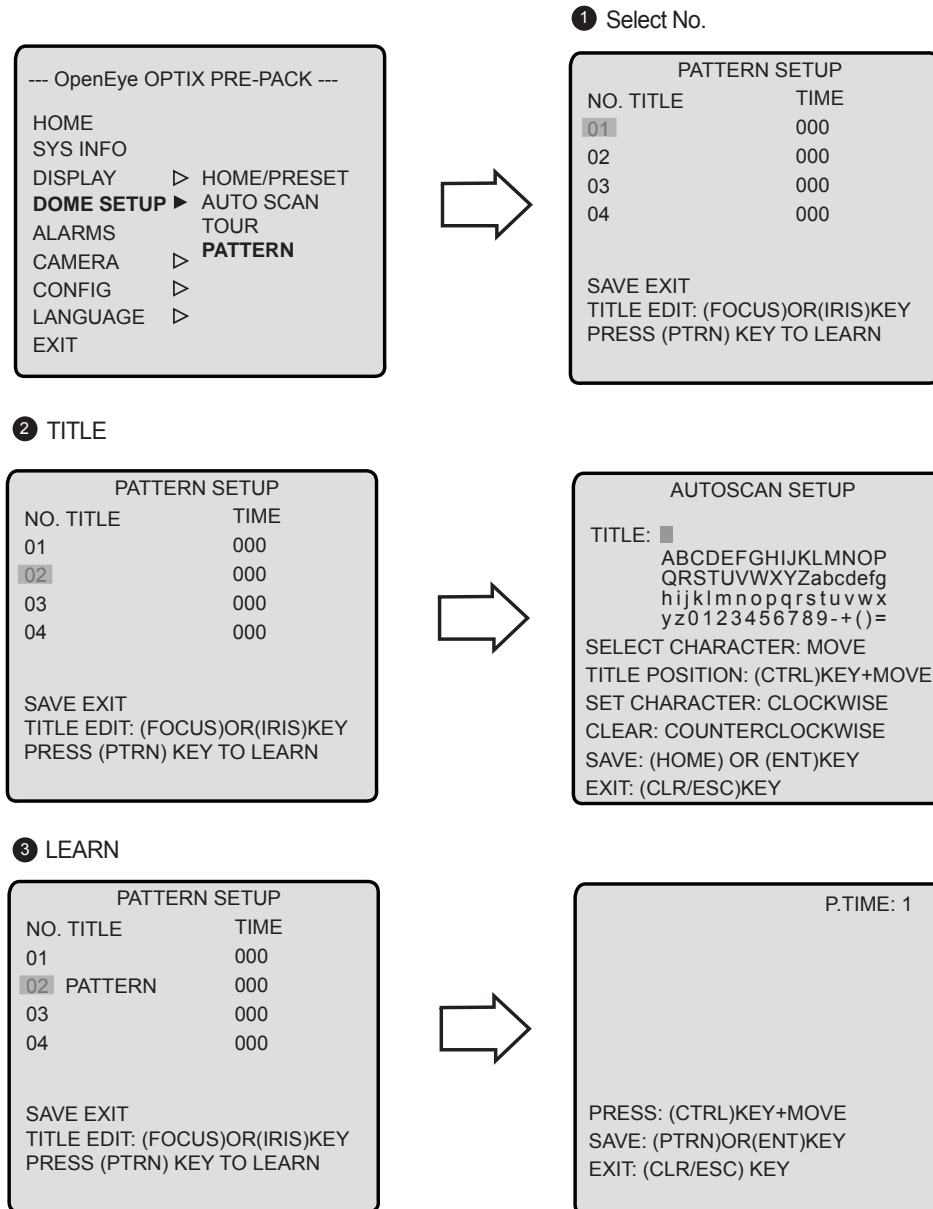
```
        TOUR SETUP
NO. 001      TOUR1
SPEED      : FAST
FREEZE     : OFF
001 319 TR2 TR8 === === ===
=== === === === === === ===
=== === === === === === ===
=== === === === === === ===
=== === === === === === ===
=== === === === === === ===
SAVE EXIT
```

```
        TOUR SETUP
NO. 001      : TOUR2
SPEED      : FAST
FREEZE     : OFF
002 SC4 === === === === ===
=== === === === === === ===
=== === === === === === ===
=== === === === === === ===
=== === === === === === ===
=== === === === === === ===
SAVE EXIT
```

```
        TOUR SETUP
NO. 001      : TOUR8
SPEED      : FAST
FREEZE     : OFF
PT2 === === === === === ===
=== === === === === === ===
=== === === === === === ===
=== === === === === === ===
=== === === === === === ===
=== === === === === === ===
SAVE EXIT
```

```
PRESS 1 + Tour Button

TOUR1           PRESET1
PRESET 1    --> DWELL TIME 5 SEC
                (DEFAULT: 5 SEC)

TOUR1           PRESET 319
PRESET 319  --> DWELL TIME 5 SEC
                (DEFAULT: 5 SEC)

TOUR2           PRESET 2
PRESET 2    --> DWELL TIME 5 SEC
                (DEFAULT: 5 SEC)

TOUR2           TOUR 2           SCAN 4
PRESET 4   .... SCAN 4 END   --> DWELL TIME 5 SEC
                                 (DEFAULT: 5 SEC)

TOUR8            TOUR 8           TOUR 8
PATTERN 2 START .... PATTERN 2 END --> DWELL TIME 5 SEC
                                       (DEFAULT: 5 SEC)
```

```
--->  Quick Move

- ->  Dwell Time

....> Programmed Speed
```

D. PATTERN

The pattern feature records a users control of the selected dome camera for up to 240 seconds. Up to four patterns can be stored and played back by pressing No. + PTRN keys subsequently on your Open-Eye Keyboard controller.

❶ Select No.

```
--- OpenEye OPTIX PRE-PACK ---

HOME
SYS INFO
DISPLAY        ▷ HOME/PRESET
DOME SETUP ▶ AUTO SCAN
ALARMS           TOUR
CAMERA       ▷ PATTERN
CONFIG        ▷
LANGUAGE   ▷
EXIT
```

```
             PATTERN SETUP
NO. TITLE            TIME
01                   000
02                   000
03                   000
04                   000


SAVE EXIT
TITLE EDIT: (FOCUS)OR(IRIS)KEY
PRESS (PTRN) KEY TO LEARN
```

❷ TITLE

```
          PATTERN SETUP
NO. TITLE            TIME
01                   000
02                   000
03                   000
04                   000


SAVE EXIT
TITLE EDIT: (FOCUS)OR(IRIS)KEY
PRESS (PTRN) KEY TO LEARN
```

```
            AUTOSCAN SETUP

 TITLE: ▮
        ABCDEFGHIJKLMNOP
        QRSTUVWXYZabcdefg
        hijklmnopqrstuvwx
        yz0123456789-+()=
SELECT CHARACTER: MOVE
TITLE POSITION: (CTRL)KEY+MOVE
SET CHARACTER: CLOCKWISE
CLEAR: COUNTERCLOCKWISE
SAVE: (HOME) OR (ENT)KEY
EXIT: (CLR/ESC)KEY
```

❸ LEARN

```
          PATTERN SETUP
NO. TITLE            TIME
01                   000
02   PATTERN         000
03                   000
04                   000


SAVE EXIT
TITLE EDIT: (FOCUS)OR(IRIS)KEY
PRESS (PTRN) KEY TO LEARN
```

```
                        P.TIME: 1










PRESS: (CTRL)KEY+MOVE
SAVE: (PTRN)OR(ENT)KEY
EXIT: (CLR/ESC) KEY
```

❹ **Pattern Call**: Input the Pattern NO. (1~4) and press the PTRN button to call the Tour.

❺ **Pattern Stop**: If you have a Joystick connected, move the joystick anywhere to stop the function.

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4.6 ALARMS

❶ NO. Alarm Input

--- OpenEye OPTIX PRE-PACK ---

HOME
SYS INFO
DISPLAY   ▷
DOME SETUP ▷
ALARMS
CAMERA   ▷
CONFIG   ▷
LANGUAGE   ▷
EXIT

ALARM SETUP					
NO.	PRI	MODE	IN	OUT	TIME
01	1	===	OFF	OFF	05
02	1	===	OFF	OFF	05
03	1	===	OFF	OFF	05
04	1	===	OFF	OFF	05
05	1	===	OFF	OFF	05
06	1	===	OFF	OFF	05
07	1	===	OFF	OFF	05
08	1	===	OFF	OFF	05
SAVE EXIT					

❷ PRI (Priority)

❸ Mode

Stored Preset, Tour, Auto Scan and Pattern

ALARM SETUP					
NO.	PRI	MODE	IN	OUT	TIME
01	2	===	OFF	OFF	05
02	1	===	OFF	OFF	05
03	1	===	OFF	OFF	05
04	1	===	OFF	OFF	05
05	1	===	OFF	OFF	05
06	1	===	OFF	OFF	05
07	1	===	OFF	OFF	05
08	1	===	OFF	OFF	05
SAVE EXIT					

ALARM SETUP					
NO.	PRI	MODE	IN	OUT	TIME
01	2	PT2	OFF	OFF	05
02	1	===	OFF	OFF	05
03	1	===	OFF	OFF	05
04	1	===	OFF	OFF	05
05	1	===	OFF	OFF	05
06	1	===	OFF	OFF	05
07	1	===	OFF	OFF	05
08	1	===	OFF	OFF	05
SAVE EXIT					

Note: If there is no memorized Preset, AutoScan, Tour or Pattern, you cannot set up this function

❹ **In**: OFF (No Activation)
          NC (Normally Closed)
          NO (Normally Open)
❺ **Out**: 1~4 (Relay Out 1, 2, 3, 4), Off (No Output)
❻ **Time**: Alarm will be held for programmed time (05 to 99 sec.)

4.7 CAMERAS

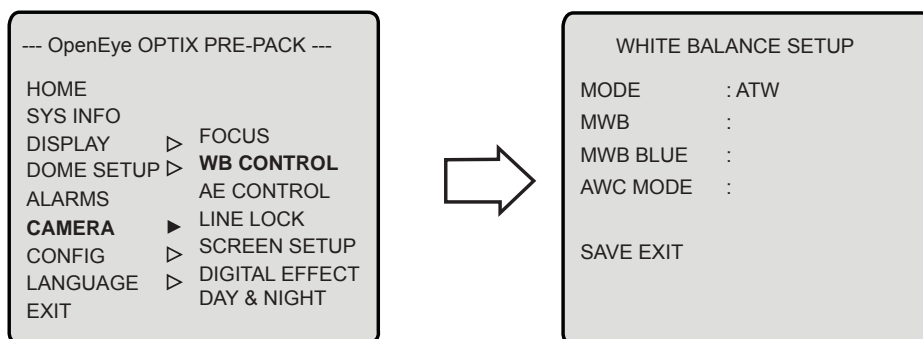**Note**: This menu feature will depend on the camera module installed in your dome camera.

A. FOCUS

```
--- OpenEye OPTIX PRE-PACK ---

HOME
SYS INFO
DISPLAY        ▷  FOCUS
DOME SETUP ▷  WB CONTROL
ALARMS            AE CONTROL
CAMERA        ►  LINE LOCK
CONFIG          ▷  SCREEN SETUP
LANGUAGE    ▷  DIGITAL EFFECT
EXIT                  DAY & NIGHT
```

```
            FOCUS SETUP
MODE                    AUTO

SAVE EXIT




SAVE EXIT
```
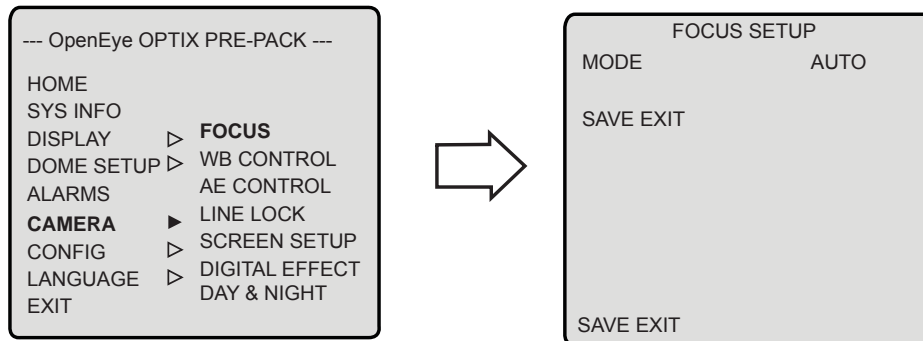
MODE: AUTO / MANUAL:
Use AUTO mode in normal use.

B. WB CONTROL

```
--- OpenEye OPTIX PRE-PACK ---

HOME
SYS INFO
DISPLAY        ▷  FOCUS
DOME SETUP ▷  WB CONTROL
ALARMS            AE CONTROL
CAMERA        ►  LINE LOCK
CONFIG          ▷  SCREEN SETUP
LANGUAGE    ▷  DIGITAL EFFECT
EXIT                  DAY & NIGHT
```

```
        WHITE BALANCE SETUP

MODE          : ATW
MWB           :
MWB BLUE    :
AWC MODE    :


SAVE EXIT
```

MODE: ATW/INDOOR/OUTDOOR/MWB/AWC
MWBRED (Manual):-3-3
MWBBLUE (Manual):-3-3
AWC MODE (Auto White Balance Control): LOCK/PUSH
INDOOR: Color Temperature to 3200K
OUTDOOR: Color Temperature fix 5400K

Use the ATW mode for normal use.
MWB RED and MWBBLUE menus are controllable only in MWB. AWC MODE is controllable only in AWC mode. In MWB (Manual WB) or AWC mode.

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C. AE CONTROL

```
--- OpenEye OPTIX PRE-PACK ---

HOME
SYS INFO
DISPLAY        ▷  FOCUS
DOME SETUP ▷  WB CONTROL
ALARMS            AE CONTROL
CAMERA       ►  LINE LOCK
CONFIG        ▷  SCREEN SETUP
LANGUAGE  ▷  DIGITAL EFFECT
EXIT                 DAY & NIGHT
```

```
        WHITE BALANCE SETUP

MODE                : FULL AUTO
IRIS                    :
GAIN (AGC)        :
SHUTTER SPEED  :
SLOW SHUTTER    : OFF


SAVE EXIT
```
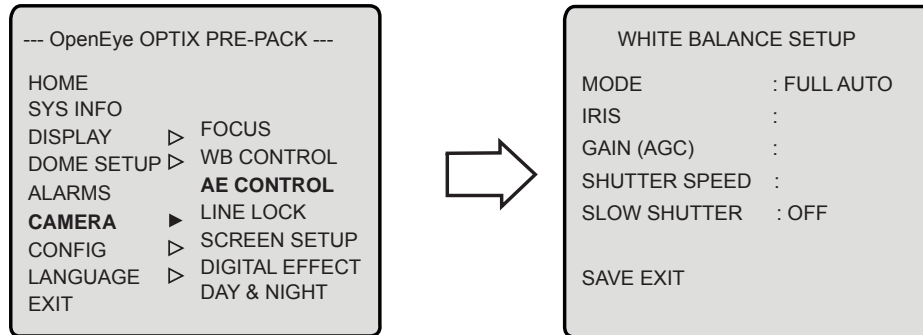
MODE: FULL AUTO/ SHUTTER FIX/ IRIS FIX/ AGC FIX/ MANUAL
IRIS: CLOSE/ F22/ F19/ F16/ FU/ F11/ F9.6/ F8.L0/ F6.8/ F5.6/ F4.8/ F4.0/ F3.4/ F2.8/ F2.4/ F1.6/ AUTO
GAIN: AUTO /OFF/ 8dB/ 10dB ... / 38dB
        The AGC (Off-38 dB) effects only AGC FIX and Manual Mode.
SHUTTERSPEED: 1/60(1/50), 1/100(1/120) ... , 1/3500, 1/4000, 1/6000, 1/10,000
        The shutter speed effects only SHUTTER FIX and Manual Mode.

D. LINE LOCK

```
--- OpenEye OPTIX PRE-PACK ---

HOME
SYS INFO
DISPLAY        ▷  FOCUS
DOME SETUP ▷  WB CONTROL
ALARMS            AE CONTROL
CAMERA       ►  LINE LOCK
CONFIG        ▷  SCREEN SETUP
LANGUAGE  ▷  DIGITAL EFFECT
EXIT                 DAY & NIGHT
```

```
        WHITE BALANCE SETUP

MODE                : INTERNAL
PHASE               :


SAVE EXIT
```
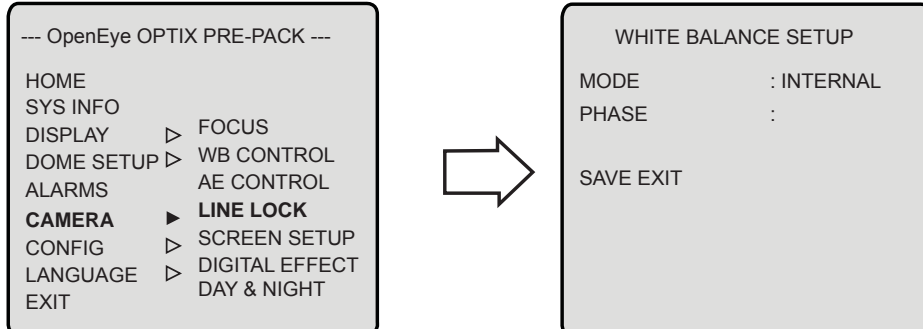
MODE INTERNAL/EXTERNAL: Adjusts phase of picture with other cameras in EXTERNAL MODE
PHASE   0-255
FACTORY: INTERNAL

Note: USE INTERNAL mode for normal use. If you use NTSC (60Hz) or PAL (50Hz) mode, it is possible to utilize external mode. If you are using NTSC (50Hz) or PAL (60Hz), it is highly recommended to use internal mode.

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E. SCREEN SETUP

```
--- OpenEye OPTIX PRE-PACK ---

HOME
SYS INFO
DISPLAY          ▷  FOCUS
DOME SETUP ▷     WB CONTROL
ALARMS              AE CONTROL
CAMERA        ►     LINE LOCK
CONFIG           ▷  SCREEN SETUP
LANGUAGE     ▷  DIGITAL EFFECT
EXIT                DAY & NIGHT
```

```
            SCREEN SETUP

BRIGHTNESS        : 08
SHARPNESS         : 08
BACK LIGHT        : AUTO
BMB MODE          : OFF
BMB LEVEL         :7


SAVE EXIT
```
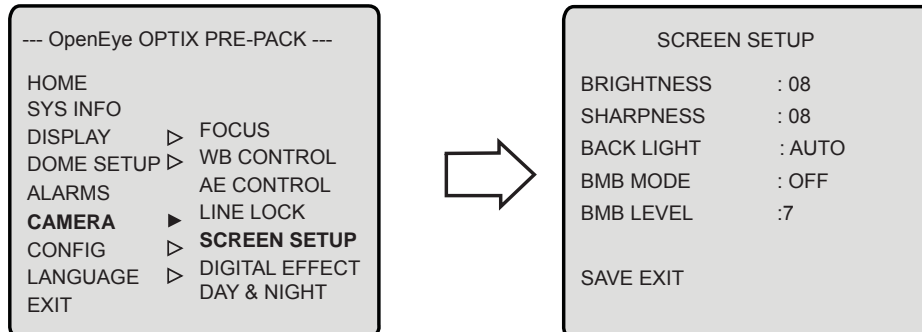
BRIGHTNESS: You can adjust the camera BRIGHTNESS using this mode. (0 ~ 15)
SHARPNESS: The higher the value, the more edges in the picture will be enhanced (0 ~ 15)
BACKLIGHT: Camera background light (On/Off)

F. DIGITAL EFFECT

```
--- OpenEye OPTIX PRE-PACK ---

HOME
SYS INFO
DISPLAY          ▷  FOCUS
DOME SETUP ▷     WB CONTROL
ALARMS              AE CONTROL
CAMERA        ►     LINE LOCK
CONFIG           ▷  SCREEN SETUP
LANGUAGE     ▷  DIGITAL EFFECT
EXIT                DAY & NIGHT
```

```
         DIGITAL EFFECT SETUP

DIGITAL ZOOM    : 4X
FLICKERLESS    : OFF


SAVE EXIT
```
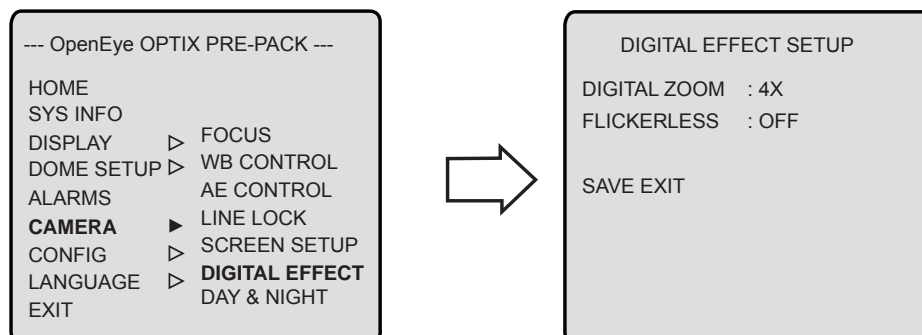
DIGITAL ZOOM
> **Off**: Zoom range is limited to the optical range
> **On**: 2X/3X/---/9X/10X
> The factory default is 4X

FLICKERLESS: On/Off
If the screen appears to pulsate, flicker and/or even roll, it is possible that you need to use FLICKERLESS Control. The main purpose of FLICKERLESS control is to overcome this effect which is caused by the harmonic frequency difference between the cycle of 50Hz fluorescent lighting and the vertical synchronization of the camera which causes the "Flicker" on a monitor. The 50Hz power cycle of a fluorescent light causes a "pulsating" image which is overcome by turning on the FLICKERLESS control.

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G. DAY & NIGHT

```
--- OpenEye OPTIX PRE-PACK ---

HOME
SYS INFO
DISPLAY          ▷  FOCUS
DOME SETUP ▷  WB CONTROL
ALARMS              AE CONTROL
CAMERA          ►  LINE LOCK
CONFIG           ▷  SCREEN SETUP
LANGUAGE     ▷  DIGITAL EFFECT
EXIT                  DAY & NIGHT
```

```
        DAY & NIGHT SETUP

MODE                : AUTO


SAVE EXIT
```
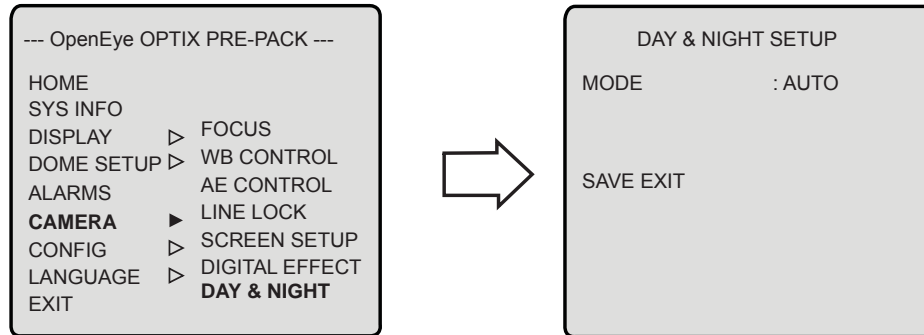
The Day/Night option removes the IR cut filter on the camera and makes the camera sensitive to near infrared. When Day/Night is ON, the color model changes to B&W mode automatically.

The operator can enable Day/Night for all dome cameras at the same time. If the GLOBAL key function is enabled, 21 + GLB will turn Off the Day/Night, 22 + GLB will turn on the Day/Night Mode.

MODE   **AUTO/ON/OFF**

AUTO: Camera goes into Black and White mode at low light.
ON/OFF: It will enable and disable DAY & NIGHT mode of an individual camera

4.8 CONFIG

A. INIT DATA

❶ ON/OFF

```
--- OpenEye OPTIX PRE-PACK ---

HOME
SYS INFO
DISPLAY        ▷
DOME SETUP ▷
ALARMS
CAMERA      ▷  INIT DATA
CONFIG      ►  DOME RESET
LANGUAGE    ▷  GENERAL
EXIT
```

```
          INIT DATA SETUP
INIT. ALL(FACTORY)     : OFF
INIT. CAMERA           : OFF
INIT. AREA TITLE       : OFF
INIT. PRIVACY ZONE     : OFF
INIT. PRESET           : OFF
INIT. TOUR             : OFF
INIT. PATTERN          : OFF
INIT. SCAN             :OFF
SAVE EXIT
```

```
          INIT DATA SETUP
INIT. ALL(FACTORY)
INIT. CAMERA
INIT. AREA TITLE
INIT. PRIVACY ZONE
INIT. PRESET
INIT. TOUR
INIT. PATTERN
INIT. SCAN
SAVE EXIT
```

```
CONTINUE?
YES: HOME/ENT
NO: CLR
```

```
INITIALIZING DATA ...
```

1. INIT. ALL
Erase all stored data from the Flash ROM of the selected dome camera (Factory Default). You will then be asked to enter Yes or No. If you intend to erase all data then press the ENT/HOME Key, otherwise press the CLR/ESC key to exit without erasing. The erased data includes all stored data (Titles, Presets, and Tours).

B. DOME RESET

```
--- OpenEye OPTIX PRE-PACK ---

HOME
SYS INFO
DISPLAY        ▷
DOME SETUP ▷
ALARMS
CAMERA      ▷   INIT DATA
CONFIG      ►   DOME RESET
LANGUAGE  ▷   GENERAL
EXIT
```

```
RESET: (HOME)OR(ENT) KEY
CANCEL: (CLR/ESC) KEY
```
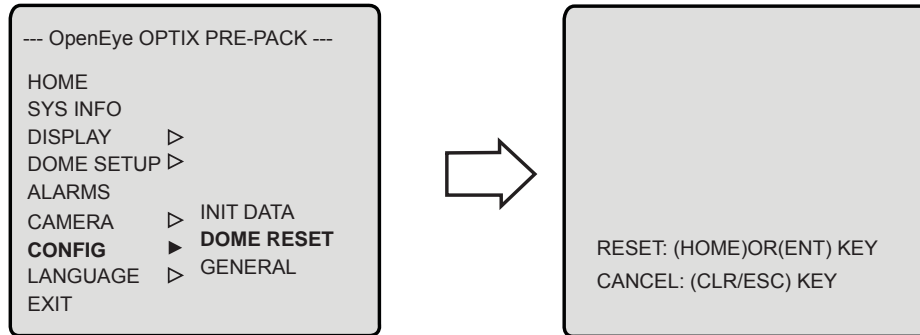
This feature is used to reset the micro processor of the dome camera. The main power will be turned OFF and then ON again during this process.

C. RELOAD ID

```
--- OpenEye OPTIX PRE-PACK ---

HOME
SYS INFO
DISPLAY         ▷
DOME SETUP ▷
ALARMS
CAMERA      ▷   INIT DATA
CONFIG      ►   DOME RESET
LANGUAGE  ▷   GENERAL
EXIT
```

```
GENERAL CONFIG SETUP
GLOBAL FUNCTION: OFF


SAVE EXIT
```
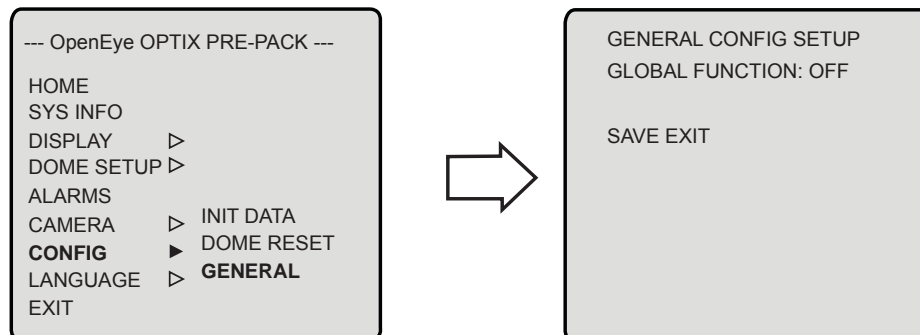
This feature is used to reload the ID of a selected dome camera after changing the ID without Power Off.

D. LANGUAGE

```
--- OpenEye OPTIX PRE-PACK ---

HOME
SYS INFO
DISPLAY        ▷   ENGLISH
DOME SETUP ▷   RUSSIAN
                     GERMAN
ALARMS            FRENCH
CAMERA      ▷   SPANISH
CONFIG      ▷   ITALIAN
LANGUAGE  ►   POLISH
EXIT                PORTUGUESE
```

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4.9 EXIT

1. To exit the main menu, select the CLR / ESC key or select the MENU / LOCK button.

2. Exit the main menu by selecting EXIT mode

```
--- OpenEye OPTIX PRE-PACK ---

HOME
SYS INFO
DISPLAY        ▷
DOME SETUP ▷
ALARMS
CAMERA         ▷
CONFIG         ▷
LANGUAGE    ▷
EXIT
```
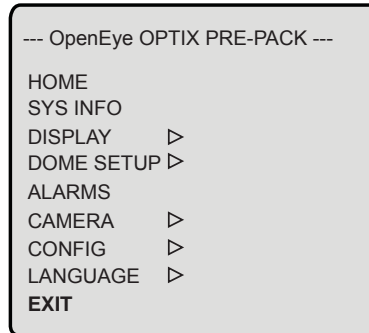
5. TECHNICAL SPECIFICATIONS

Camera: CM-525P

Minimum Illumination

1.0 lx (30IRE); Day & Night Off (Color)
0.1 lx (30IRE); Day & Night On (B&W)
0.01 lx; Slow Shutter X 128 On
0.001 lx (30IRE); Day&Night On (B&W)+ DSS

Lens

25X Optical Zoom with Auto Focus
(10X Digital Zoom (F = 1.6~3.7, 50IRE, 3.8mm~95mm)

S/N ratio

50 dB

Minimum Object Distance

0.1m

General

Certification		CE EMC, FCC CLASS A
Image Sensor	NTSC	1/4" SONY Super HAD CCD, 768(H)x494(V)
	PAL	1/4" SONY Super HAD CCD, 752(H)x582(V)
Horizontal Resolution		470/460 lines (NTSC/PAL)
Pan Angle		360° continuous rotation
Manual Speed		0.1° to 90° (Proportional Zoom)
		Turbospeed: 360°/sec. maximum, w/ ctrl pressed
Preset Speed		360°/sec. maximum
Tilt Angle		0° to 90° (User selectable to prevent obstruction of the horizontal view)
Manual Speed		0.1° to 90°/sec. (proportional to zoom)
ID (Camera Address)		999 Selectable Addresses (4095 Optional)
Preset Position		319 Positions with camera status (16-character title)
Ambient Environment Temperature		-45°C to 50°C
Alarm Out		4 Relays 24 VDC/1AMax (selectable NC/NO)
Alarm Input		8 Normal open, dry contact (programmable NC/NO)
On-Screen Display		Displays camera ID, Pan/TiltAngle, Flip, Zoom, Privacy Zone
Tour		8 Guard Tours (Preset, Pattern, AutoScan, Tour Input)
Pattern		4 pattern, 240sec Memory
Flip		Rotate 180° at bottom of tilt
Communication Type		RS-485/422, Baud Rate: 9600bps/(STD), (OPT: 4800, 2400, 1200)
Micro Step		0.01°
Access Time		0.75 second maximum preset recall time

Electrical

Input Voltage	20 to 28VAC; 24VAC nominal, built-in power-line surge
Power	Nominal 24VAC/VDC 2A maximum
Power Source	24VAC, 50/60Hz
Power Consumption	Heater 20watts X2
	Blower 2watts
	Dome Camera 20watts

Mechanical

Construction	Aluminum steel and Plastic
Finish	Polyester Power Coat
Dome Bubble	Poly carbonate
	See Dimensions section
	IP 65
	Approx. 5Kg (11.02lbs)

7.2" [182]

4.5" [114.5]

6.7" [170]

10.8" [273.8]

OpenEye OPTIX Pro-Pack Dome Camera

4.9" [124]

4- ø 4.3"[11]

4.9" [124]

1-1/4" NPT PIPE Thread

5.9" [150]

1.14" [29]

Ceiling Mount

1-1/4" PT-Thread

.71" [18]

7.9" [200]

.71" [18]

1-1/4" PT-Thread

1.8" [45]

Ceiling Pipe

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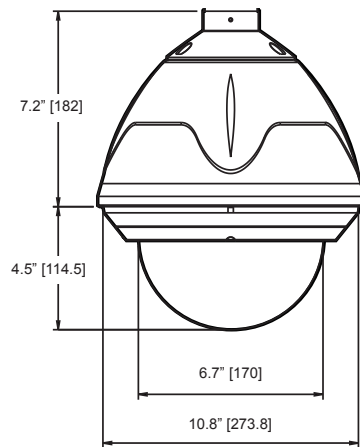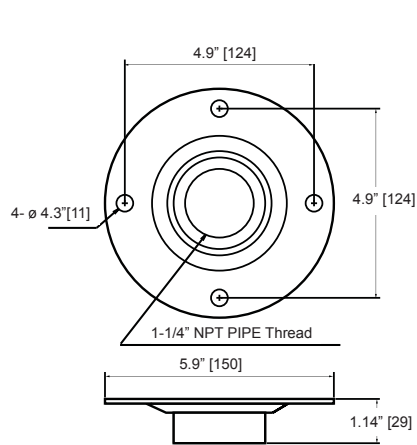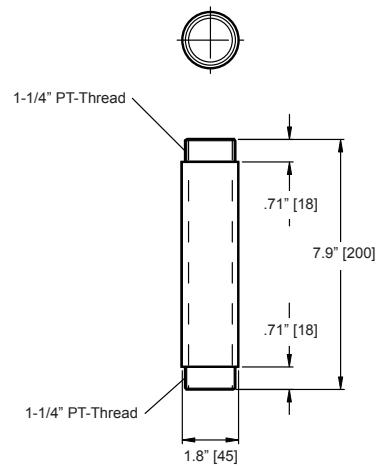
APPENDIX A - TROUBLESHOOTING

If problems occur, verify the installation of the camera with the instructions in the manual and with other operating equipment. Isolate the problem to specific pieces of equipment in the system and refer to the equipment manual for further information.

Problem	Solution
No Video	Verify that power is connected to all pieces of equipment in the system. Verify that the power switches are in the "ON" position.
Poor Video Quality	Check the video connections. Check that the BNC connectors are inserted properly. Check the voltage level of the dome camera. Check that 8-pin cable is connected to the keyboard. 8-pin cable for keyboard is proprietary. Cable for video is shielded.
Dome Cameras lose their positions	Reset the dome camera using the dome configuration menus. Check that the dome cameras are properly in the base. Check the voltage level of the dome camera.
Camera number does not match the multiplexer number	Check the camera ID and insert the BNC cable into the proper input of the multiplexer.
Picture is torn when switching	Check Line Lock setting and adjust phase of L/L.

APPENDIX B - OPTIONAL ITEMS

A. PARAPET WALL (SWING ARM) & MOUNT BRACKET
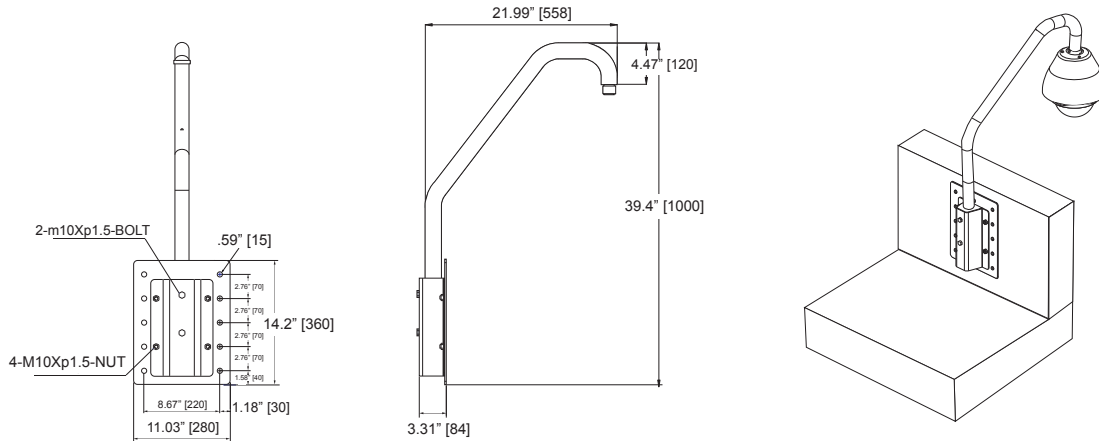
B. PARAPET ROOF TOP MOUNT BRACKET
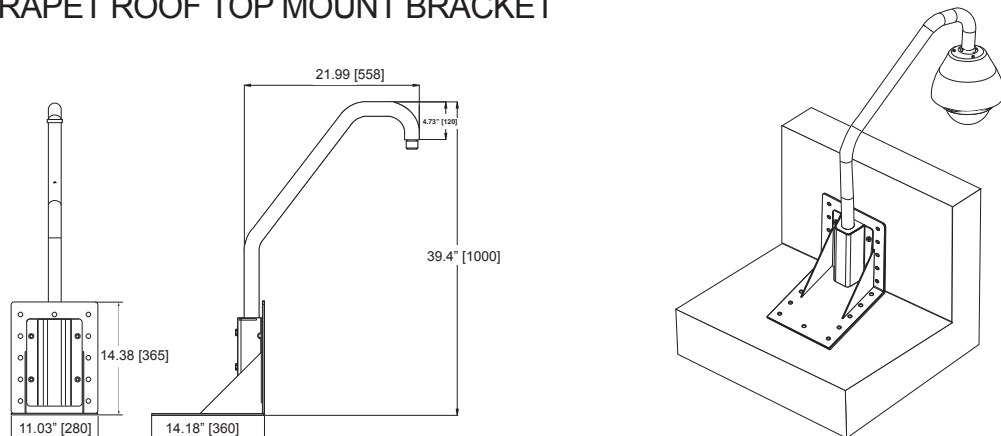
C. INDOOR / OUTDOOR HOUSING

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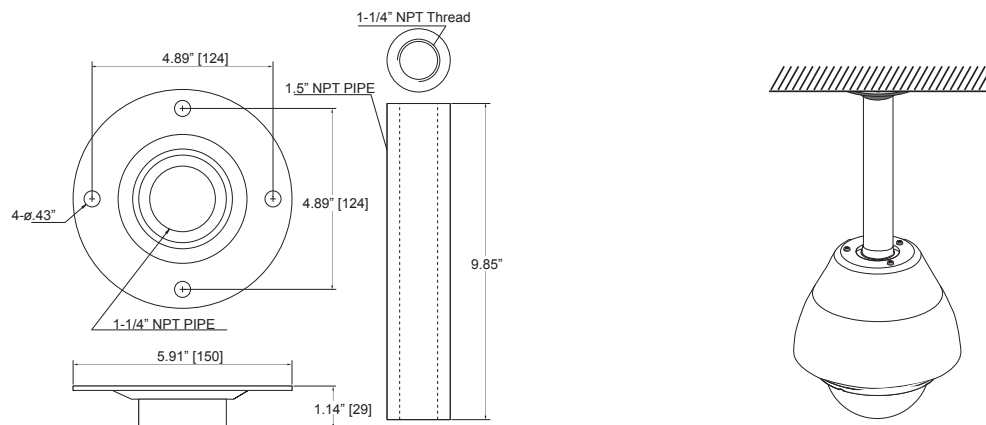
APPENDIX B - OPTIONAL ITEMS
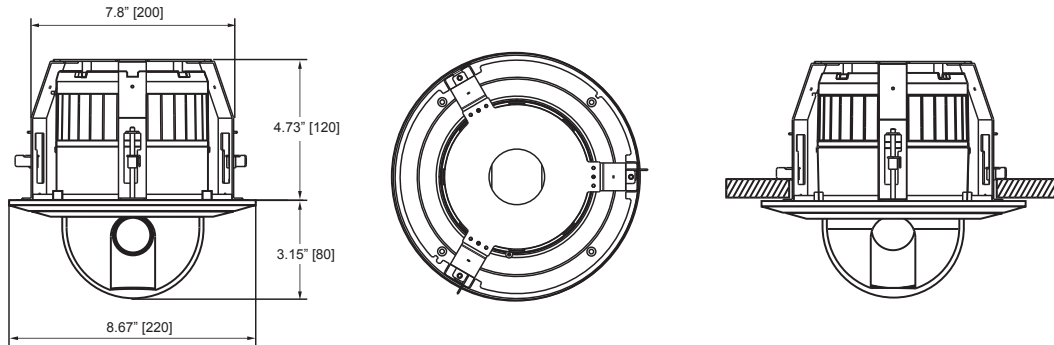
D. CORNER MOUNT ADAPTOR
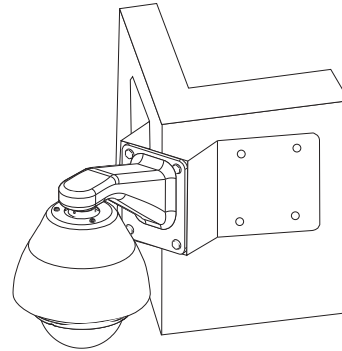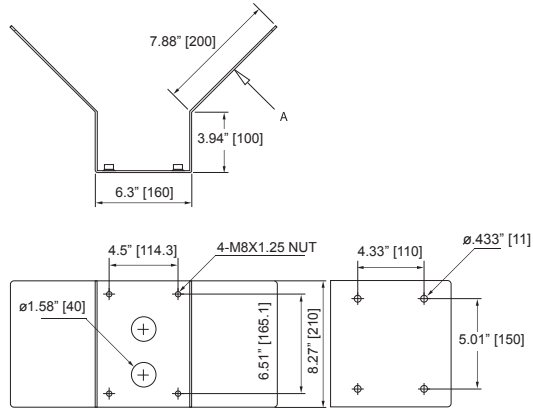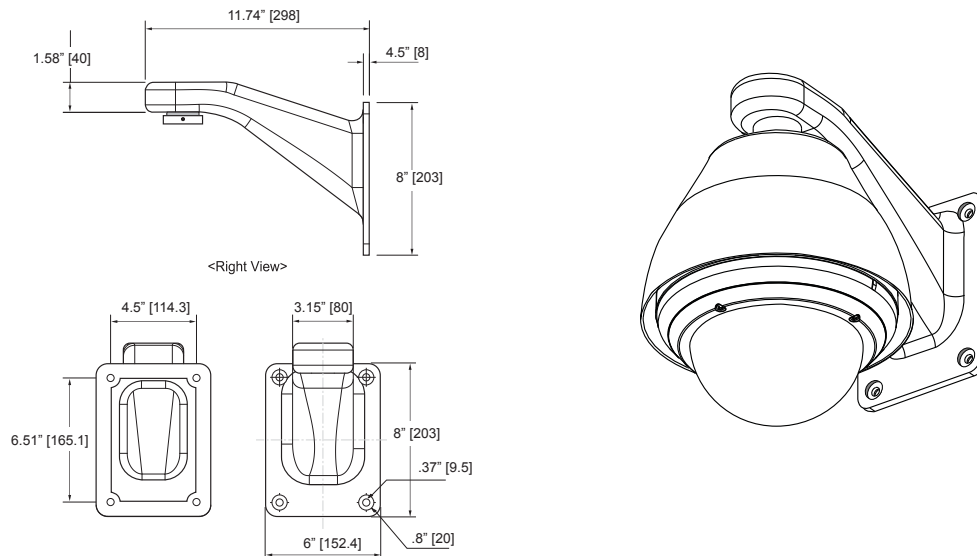

E. ROOF MOUNT ADAPTOR
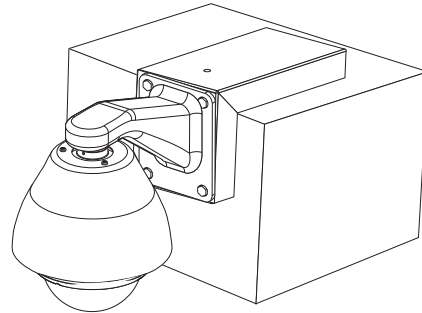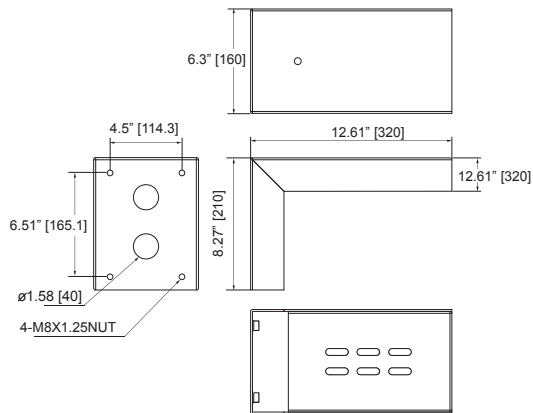
F. POLE MOUNT ADAPTOR

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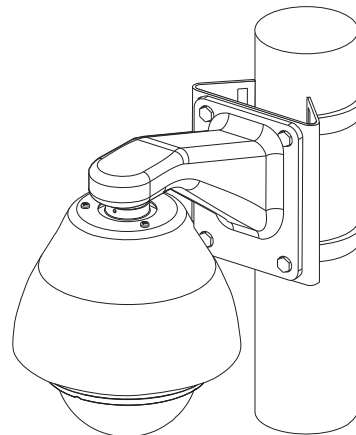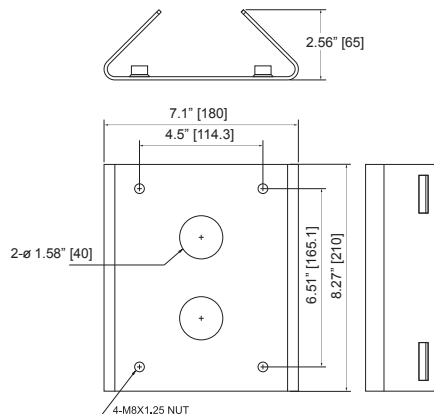
APPENDIX B - OPTIONAL ITEMS

G. FLUSH MOUNT ADAPTOR

7.8" [200]

4.73" [120]

3.15" [80]

8.67" [220]

H: WALL MOUNT ADAPTOR

11.74" [298]

1.58" [40]

4.5" [8]

8" [203]

<Right View>

4.5" [114.3]

3.15" [80]

6.51" [165.1]

8" [203]

.37" [9.5]

6" [152.4]

.8" [20]

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Open Eye®

PRODUCT SERVICE

OpenEye website: http://www.openeye.net

Call 1-888-542-1103 for questions or comments regarding your OpenEye OPTIX camera or accessories.

SHIPPING YOUR OPTIX CAMERA

Make sure to carefully package your OPTIX Dome Camera or Accessories when shipping, preferably in the original packaging. Send the unit to an authorized dealer / service center, prepaid and adequately insured. Do not send the unit to the OpenEye headquarters address listed below.

OpenEye Inc.
165 S. Pine St.
Spokane, WA 99202

1-888-542-1103